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INFORMATIONAL REPORT ON PROGRESS AND BALANCE IN THE CALIFORNIA BAY-DELTA PROGRAM

Agenda Item: 7
Meeting Date: October 9, 2003

Summary: This report discusses programmatic accomplishments during the first three years of implementation, staffing and budget issues for the California Bay-Delta Authority, and funding issues, including development of a long-range Finance Plan. [The information contained in this Item is also pertinent background information for Agenda Item 8, regarding "future priorities."]

Recommended Action: Informational only. No action to be taken.

Background

At its August 14, 2003, meeting, the Authority reviewed, discussed, and approved multi-year program plans for the 11 elements of the California Bay-Delta Program. During discussion, the Authority requested specific information about the agency – its budget, staffing, and organizational structure. This information is included as Attachment 1.

Attachment 2 (Multi-Year Goals and Objectives) compiles the program element goals and accomplishments contained in the multi-year program plans that were approved at the August meeting. In general, substantial progress has been made across the different program elements, particularly in the areas of groundwater storage, water transfers, habitat protections and restoration, levee maintenance and improvement, and the integration of science in the decision-making process, as well as in the implementation of various program actions.

It should be noted, however, that progress, to a degree, has been hampered by unreliable funding from the State's general fund and the need for a still-pending Federal reauthorization, although these issues have not materially affected Program balance. A summary of the Program funding to date (Years 1-3) and for the remaining years in Stage 1 (Years 4-7) is included in Attachment 3.

Finally, the need for a long-term approach to Program financing is paramount. Attachment 4, the Long-Term Finance Plan Status Update, outlines a process for the preparation of three finance reports. During the process, agency and stakeholder work groups will be established to provide input and review of the reports and the process. An Independent Review Panel of national experts on public financing is being convened by staff to review and comment on each of the reports, which will then be presented to appropriate decision-making authorities, including the Bay-Delta Authority. The first of the 3 reports, *Developing Bay-Delta Program Finance Options -- Framework and Issues,* is included in this mailing. Authority staff will provide a summary of the report and the next steps regarding process and schedule at the meeting.

Fiscal Information

Not applicable

List of Attachments

Attachment 1 – California Bay-Delta Authority Budget and Staffing Report
Attachment 2 – Summary of Accomplishments-Multi-Year Program Plans
Attachment 3 – Years 1-7 (Stage 1) Funding Information
Attachment 4 – Long-Term Finance Plan Update

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Agenda Item: 7
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Attachment 1

DISCUSSION OF THE CALIFORNIA BAY-DELTA AUTHORITY BUDGET AND STAFF

Background

In September 2002, SB 1653 (Costa), established the California Bay-Delta Authority to oversee coordinated implementation of the California Bay-Delta Program (CBDA). The California Bay-Delta Authority became effective January 1, 2003, as a department within the California Resources Agency. Prior to that date, implementing agencies had assigned staff to the Program, operating under the administrative umbrella of the Department of Water Resources.

Organizational Structure

The Director has organized Authority staff into 5 Divisions: Ecosystem Restoration, Water Management and Regional Coordination, Science, Communications, and Administration (Figure 1). The organization is designed to provide the most efficient and effective structure for meeting the mandates of Senate Bill 1653, to administer the affairs of the Authority, and to oversee and coordinate a complex multi-agency program charged with improving ecosystem quality, water supply reliability, water quality, and the integrity of the levees and channels in the Bay-Delta.

Staffing and Budget for CBDA

In Fiscal Year 2001-2002, the Program was authorized 103.8 permanent State positions to support oversight and coordination of the overall Bay-Delta Program and implementation of the Science Program. As a result of State hiring freeze restrictions, position eliminations, and budget cuts imposed by the Department of Finance to mitigate the State's budget crises, the Authority's State budgeted positions have been reduced from the initial total of 103.8, to the current total of 59, an overall reduction of 56 percent (see Figure 2).

The Authority staff includes representatives from several Federal agencies (Bureau of Reclamation, Geological Survey, Fish and Wildlife Service, Natural Resources Conservation Service, and Army Corps of Engineers). In Fiscal Year 2001-2002, there were 19 Federal employees on the staff; currently, there are10 Federal employees assigned to the Authority, a 48% reduction.

Current Year Funding for Bay-Delta Program

Figure 3, depicts the total current year funds budgeted for the Bay-Delta Program. The shadowed area on the chart represents the amount budgeted for Program implementation ($803,608,000). The chart also shows the amount budgeted for the CBDA Program Oversight and Coordination ($13,321,000) and CBDA management of the Bay-Delta Science Program ($13,526,000). The following table more completely describes the activities and the budget associated with the California Bay-Delta Authority.

California Bay-Delta Authority Responsibilities and Budget

Program Oversight and Coordination

Oversight and Coordination Responsibilities	General Funds	Other Funds
Oversight of Program Implementation • Support executive staff: director, deputy, chief counsel. • Support program manager and oversight and coordination staff for ERP, WUE, transfers, watersheds, DWQ, levees, storage, conveyance and water management. • Ensure balanced Program-wide implementation. • Communicate with the Congress and the Legislature on Program progress. • Coordinate and integrate the Bay-Delta Program with other related programs. • Oversee and coordinate program implementation and integration by implementing agencies.	$4,289,000	$1,627,000
Public Affairs/Public Involvement • Prepare annual report, media, and public outreach. • Support environmenatl justice and tribal coordinators • Oversee the integration & support of Environmental Justice and Tribal activities as part of program implementation. • Support Bay-Delta Program Advisory Committee and sub-Committees. • Support the Authority members and assistants to the Authortiy and BDPAC.	$1,112,000	$375,000
Finance and Tracking • Track Program-wide progress and performance. • Prepare Finance Plan. • Oversee development of multi-year program plans and budgets. • Coordinate preparation of annual Program-wide State budgets and spending plans.	$874,000	$200,000
Administrative • Coordinate with Federal agencies to develop an annual Federal budget. • Prepare an annual State budget, for program elements and oversight and coordination duties. • Review State budget documents from other implementing agencies. • Provide administrative support to the Authority and staff: Contracts, Fiscal, Human Resources, IT	$2,253,000	$220,000

Regional Coordination • Undertake regional coordination to maximize local involvement and access. • Support regional coordinators. • Develop regional profiles and plans. • Facilitate exchange of information between the regions and the Program.	$627,000	
Water Management Strategy • Develop a Water Management Strategy. • Oversee development and use of common assumptions.	$227,000	$200,000
Legal • Represent the Program and Authority in active State and Federal litigation. • Oversee conflict of interest policies for the Authority, BDPAC, and staff. • Review all contracts, grants, and other program documents. • Manage PRA requests and the administrative record.	$1,132,000	
Environmental Compliance Strategy • Provide funding to support regulatory oversight	$ 185,000	
Total – CBDA Oversight and Coordination	**$10,699,000**	**$2,622,000**

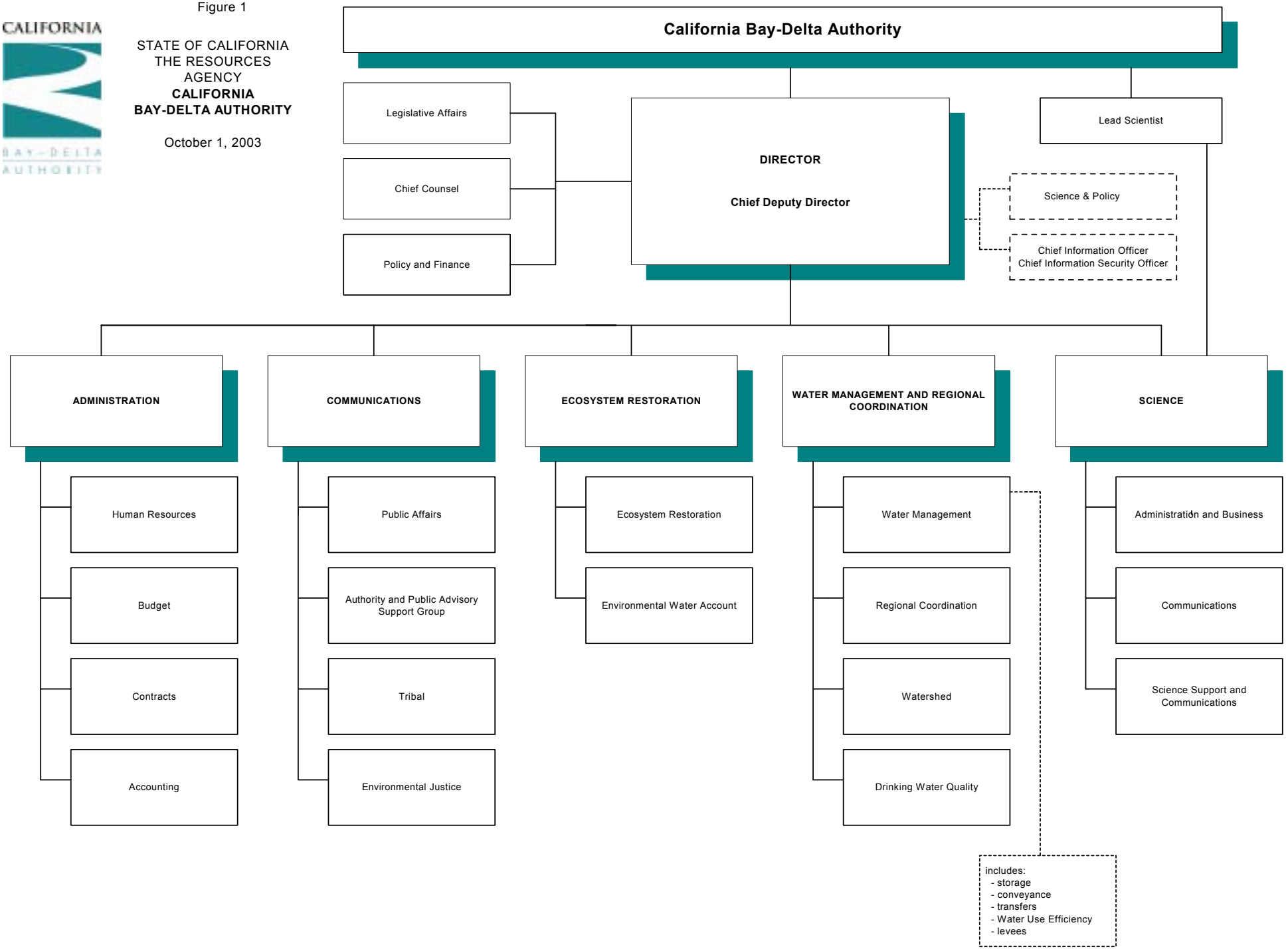
Management of the Science Program

Oversight and coordination • Review and advise on Science activities for each program element, managed by the implementing agencies. • Lead the development of a system-wide science program and strategy. • Oversee integration of Program-wide and program element science activities.	$2,000	$2,090,000
Implementation • Provide funding to support system-wide science strategies including: key research, data analysis, science advisors, science workshops and peer review.		$11,434,000
Total – CBDA Science Program	**$2,000**	**$13,524,000**

Figure 1

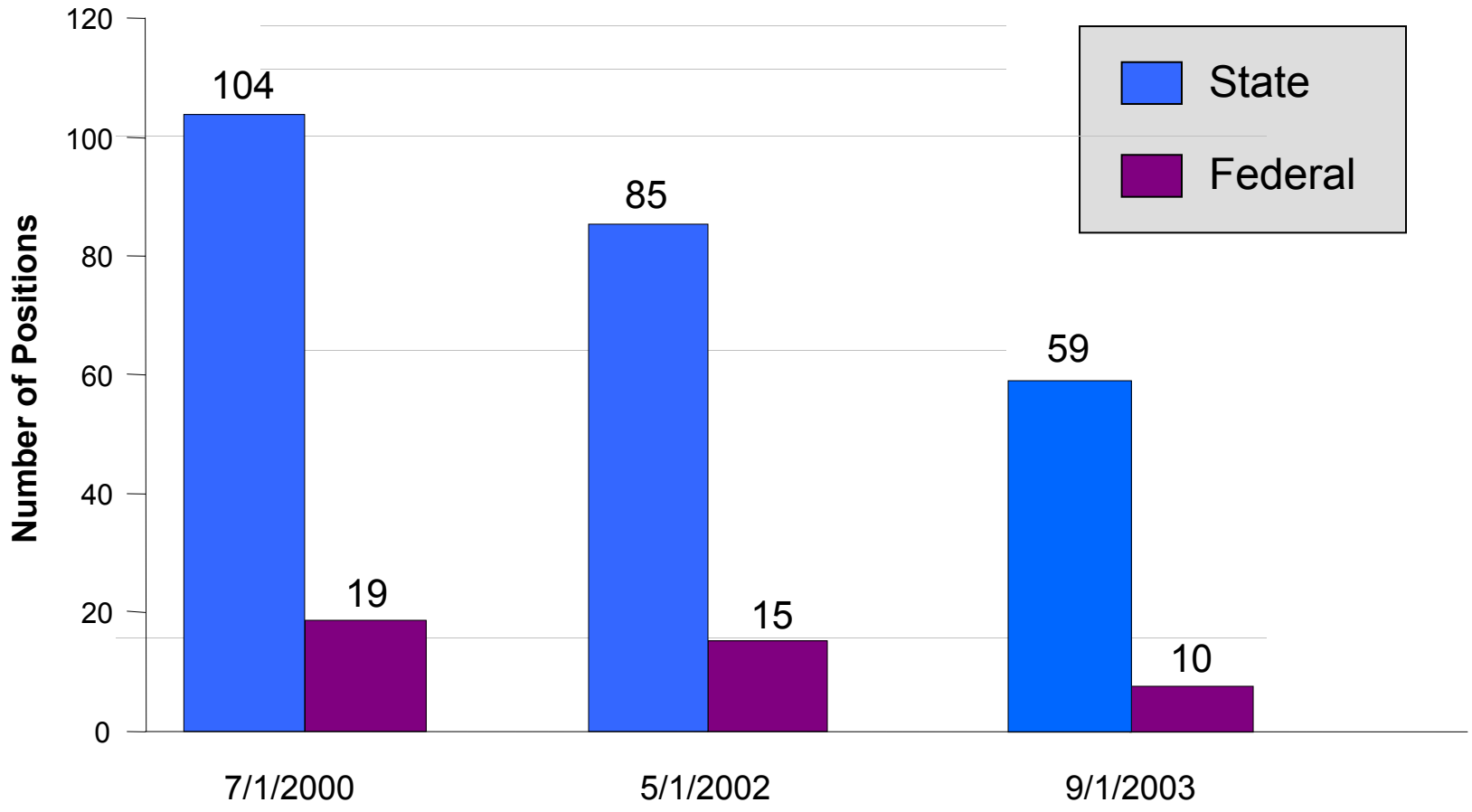
STATE OF CALIFORNIA
THE RESOURCES AGENCY
CALIFORNIA BAY-DELTA AUTHORITY

October 1, 2003

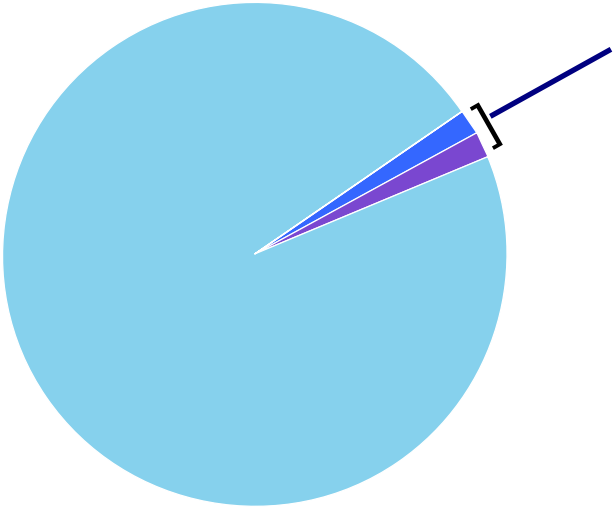


California Bay-Delta Authority

State and Federal Positions



California Bay-Delta Program
FY 2003-4 Budget



Oversight and Coordination, and Science Program $13,321,000

Science Program $13,526,000

Program Implementation $803,608,000

CALIFORNIA BAY-DELTA AUTHORITY		
CBDA Responsibility	**General Fund**	**Other Funds**
Oversight of Program Implementation	$4,289,000	$1,627,000
Public Involvement	$1,112,000	$375,000
Finance & Tracking	$874,000	$200,000
Administrative & Budget Coordination	$2,253,000	$220,000
Regional Coordination	$627,000	0
Water Management Strategy	$227,000	$200,000
Legal	$1,132,000	0
Environmental Compliance	$185,000	0
Total for Oversight & Coordination	$10,699,000	$2,622,000
Science	$2,000	$13,524,000

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Attachment 2

Multi-Year Goals & Accomplishments

August, 2003

As Approved on August 14, 2003, by:

CALIFORNIA BAY-DELTA AUTHORITY

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Drinking Water Quality Goals and Objectives

Goals of the Program and Record of Decision Commitments

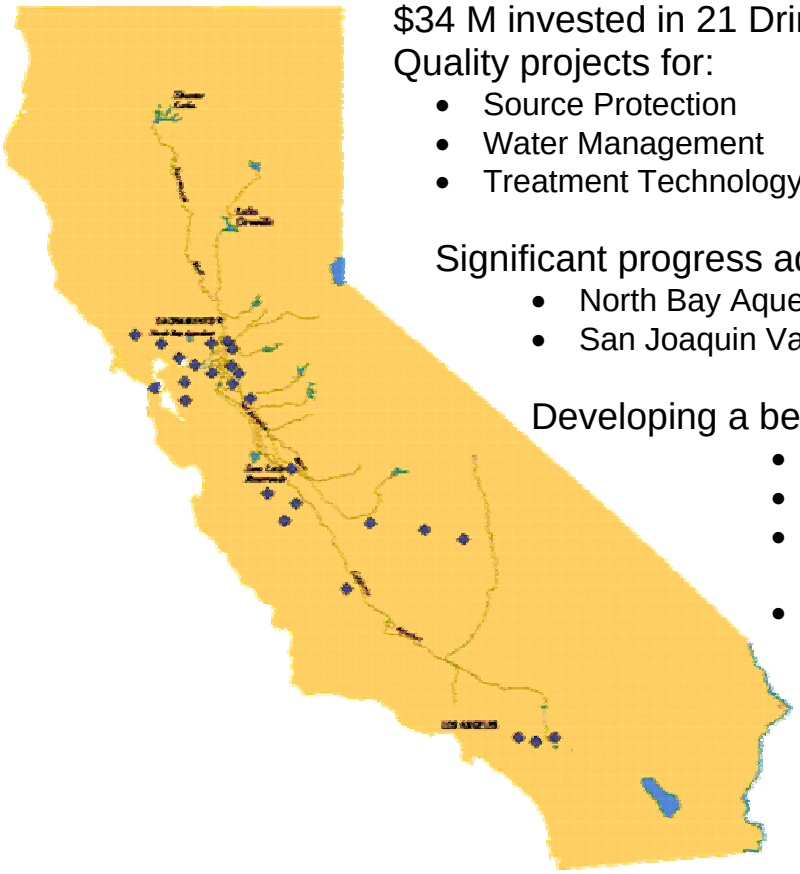
The Drinking Water Quality Program (DWQP) goal is to provide safe, reliable, and affordable drinking water to the 22 million Californians who rely on the Delta for all or part of their drinking water. To reach this goal, DWQP actions combine cost-effective improvements in source water quality, advancements in treatment technology, and innovations in water management.

Work has progressed on all of the Record of Decision commitments with emphasis on source water improvement and treatment technologies. The Drinking Water Subcommittee (DWS) of the Bay-Delta Public Advisory Committee has developed a framework for drinking water quality management stemming from discussion of the ROD water quality targets. This framework is captured in the "Equivalent Level of Public Health Protection Draft Decision Tree" (ELPH diagram) named for the language in the ROD (see detailed Program Plan). The ELPH diagram shows the broad range of actions and factors that can affect drinking water quality.

Following the ELPH diagram, the accomplishments and activities of the program are grouped into five categories:

- Improving Delta Water (includes Source Improvement, Conveyance / Delta Operations, and Storage)
- Improving Imported Water (includes CVP / SWP Operations and Storage south of Delta and Source Water Exchanges outside of the Delta)
- Improving Local Sources
- Treatment Options
- Program Management (includes Monitoring / Assessment, Implementation Commitments, and Subcommittee support)

Water Quality Program Highlights (Years 1-3)



$34 M invested in 21 Drinking Water Quality projects for:

- Source Protection
- Water Management
- Treatment Technology

Significant progress addressing

- North Bay Aqueduct water quality
- San Joaquin Valley agricultural drainage

Developing a better understanding of:

- treatment technologies
- pollutant sources
- source improvement options
- water management and water quality

'ELPH' concept and diagram

Specific Accomplishments

Improving Delta Water

- **North Bay Aqueduct Alternative Intake Study:** Evaluated relocation of aqueduct intake as part of 2001 DWQP grant.
- **North Bay Aqueduct Watershed Study:** A Proposition 204 grant to evaluate watershed management on Barker Slough has been completed. The project involved monitoring water quality and developing and implementing pilot Best Management Practices (BMPs).
- **Delta Water Quality Modeling:** The DWR Delta Modeling Section with support from the DWQP has completed a number of studies of Delta water quality resulting from various conveyance and storage alternatives.
- **CVRWQCB Basin Plan Amendment (salinity and boron):** The draft BPA was circulated for public review.

- **DWR Agricultural Drainage Program (salinity and selenium):** Includes management and coordination, monitoring and evaluation, on-farm drainage reduction, treatment, integrated drainage management, and environmental investigations.
- **Real Time Monitoring and Management of Salinity:** The Regional Board, DWR, and Lawrence Berkeley National Laboratory in cooperation with the USGS and local water districts, implemented a real-time monitoring and modeling program for salinity in the San Joaquin River. Flow and salinity were monitored, and salt load and salt assimilative capacity were modeled, for three years through December 2002.

Improving Imported Water

- **Sanitary Surveys:** DWR completed the sanitary survey of the State Water Projects and its tributaries. DWR also conducted water quality sampling of run-off into the California Aqueduct and the South Bay Aqueduct.
- **Bay Area Water Quality and Supply Reliability Program:** This program is evaluating cooperative projects among Bay Area water districts to meet their water supply reliability and drinking water quality objectives. Phase 1 evaluated overall Bay Area water quality, developed a list of potential projects, and provided a qualitative evaluation of the ability of existing infrastructure to provide sufficient high quality water to meet the drinking water objectives in the ROD.
- **San Joaquin Valley / Southern California Water Quality Exchanges:** Metropolitan Water District (MWD) has entered into two partnerships with San Joaquin Valley water agencies to explore water management opportunities to help resolve water supply and water quality management problems.
- **Operational Improvements/Recirculation in the San Joaquin River:** US Bureau of Reclamation and DWR have completed the modeling studies, which are undergoing management review. The reports will then be forwarded to the fisheries agencies for a preliminary fish and wildlife evaluation.

Improving Local Sources

- This program element was added only recently. Implementation will begin in Year 4.

Treatment Options

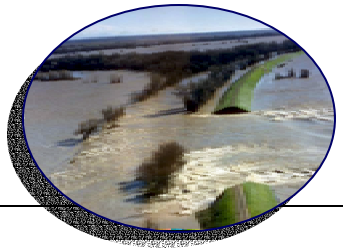
- **Ultraviolet (UV) Light Disinfection:** A CALFED grant for $161,000 was awarded to MWD to study integration of UV disinfection with treatment oxidants.
- **Ion Exchange for Organic Carbon Removal:** The DWQP awarded a grant to Solano County Water Agency to investigate application of innovative ion exchange technology for organic carbon removal. Bench scale studies are under way to be followed by a pilot scale system.
- **Regional Desalination:** Agricultural drainage water recycling using membrane technology by Panoche Drainage District (CALFED grant). The project will begin in Year 4.

- **Desalination Research and Innovation Partnership (DRIP)**: A MWD project intended to demonstrate innovative desalination technologies to treat a variety of brackish and high salinity wastewaters. The program has already resulted in the development of advanced reverse osmosis (RO) membranes.

Program Management

- **Monitoring and Assessment**: CALFED Monitoring and Assessment Program (MAP): Identified existing monitoring programs, funded 15 monitoring and assessment projects for $8 million.
- **2001 CALFED Drinking Water Quality Program Grants**: The DWQP awarded grants for 13 projects totaling $6.7 million. Emphasis in this first PSP was on monitoring and assessment.
- **2002 State Water Resources Control Board RFP**: The SWRCB, with the DWQP taking the lead on the selection process, awarded grants for 13 projects totaling $7.2 million in Prop 13 nonpoint source funds. Seven of these projects related to agriculture in the San Joaquin Valley.

Levee Program
Goals and Objectives



Goal of the Program and Record of Decision Commitments

The goal of the Levee System Integrity Program is to provide long-term protection for multiple Delta resources by maintaining and improving the integrity of the extensive Delta levees system. These efforts are being undertaken in a manner consistent with the Ecosystem Restoration Program and Conveyance Program.

The CALFED Record of Decision (ROD) identified five commitments to be met. For each ROD commitment, key objectives have been identified for the Levee System Integrity Program:

- **Provide Base Level Protection.**
  - Provide funding to help local reclamation districts reconstruct all Delta levees to a base level of protection (the PL 84-99 standard).
- **Implement Special Improvement Projects.**
  - Identify projects that will enhance flood protection beyond that provided by base level standard, necessary for identified public benefits including life and personal property protection, water quality, protecting agricultural production, and protecting ecosystems.
- **Implement a Levee Subsidence Control Plan.**
  - Develop "best management practices" to correct subsidence adjacent to levees.
  - Coordinate research to quantify effects and extent of inner-island subsidence.
- **Implement a Levee Emergency Management and Response Plan.**
  - Enhance the ability of local, State, and Federal agencies to rapidly respond to levee emergencies.
- **Perform a Delta Levee Risk Assessment.**
  - Perform a risk assessment to quantify the major risks to Delta resources from floods, seepage, subsidence, and earthquakes, evaluate the consequences, and develop recommendations to manage the risk.

Levee Program Highlights (Years 1-3)

Specific Accomplishments

Provide Base Level Protection

- Improved 40 levee miles up to the PL 84-99 standard, including projects on Sherman, Bradford, and Jersey Islands and Webb Tract.

Implement Special Improvement Projects

- Continued work on developing general permit terms and conditions with the Regional Water Quality Control Board (RWQCB) for dredging projects less than 100,000 cubic yards.
- Reused over 650,000 cubic yards of dredge material to increase levee stability and habitat enhancement.
- Initiated efforts to amend the Suisun Marsh Preservation Agreement and develop a long-term plan for levee protection consistent with regulatory permit requirements and endangered species protection.
- Complete the Suisun Marsh Levee Investigation, which will be considered when the Suisun Marsh is evaluated for inclusion in the Levee System Integrity Program.

Implement a Levee Subsidence Control Plan

- Initiated a demonstration project on Twitchell Island to determine relationships between biomass accumulation, sediment deposition, and water management and to delineate priority areas on the island for subsidence control.
- Developed the Strategic Framework for Reversing the Effects of Subsidence in the Sacramento-San Joaquin Delta for guiding future broad-scale study of subsidence solutions.
- The Suisun Marsh Charter process is developing conceptual models that identify current and potential land management opportunities that may reduce ongoing subsidence. In addition, Amendment 2b of the Suisun Marsh Preservation Agreement (SMPA) includes a water management program that could also provide valuable data for modifying land management that would reduce subsidence and provide for sustainable wetland management.

Implement a Levee Emergency Management and Response Plan

- Coordinated with three levee maintaining agencies (LMAs) and provided funds for emergency measures to prevent overtopping of the Van Sickle Island levee during high tide and high wind conditions.
- Provided emergency funding to control excessive seepage and levee erosion on Brannan Island.
- Provided funding to restore integrity to the Empire Tract levee that was subject to excessive seepage and erosion.

Perform a Delta Levee Risk Assessment

- Developed Statement of Work to perform initial Risk Management Analysis study.

Ecosystem Restoration Program Goals and Objectives

The Ecosystem Restoration Program (ERP) is designed to (1) maintain, improve, and increase aquatic and terrestrial habitats and improve ecological functions in the San Francisco Bay and Sacramento-San Joaquin Delta (Bay-Delta) to support sustainable populations of diverse and valuable plant and animal species; (2) achieve recovery of at-risk species dependent on the Delta and Suisun Bay; and (3) support the recovery of at-risk species in San Francisco Bay and in the watershed above the estuary. The ERP is essential to sustaining environmental regulatory compliance across all Bay-Delta Program elements.

The CALFED Programmatic Environmental Impact Statement / Report identified six strategic goals for ERP to meet. For each goal, strategic objectives were identified. A summary of the goals and objectives follow.

- **Recover endangered and other at-risk species and native biotic communities.**
  - Achieve recovery and then sustain large populations of specific at-risk native species in the Delta, Suisun Bay and Marsh. Recover and sustain specific native at-risk species in the Bay-Delta estuary and its watershed
  - Enhance or conserve native biotic communities in the Bay-Delta estuary and its watershed
  - Maintain the abundance and distribution of specific native species
- **Rehabilitate ecological processes.**
  - Establish and maintain hydrologic and hydrodynamic regimes for the Bay and Delta that support the recovery and restoration of native species and biotic communities, restore and maintain functional natural habitats, and maintain harvested species
  - Increase estuarine productivity and rehabilitate estuarine food web processes to support recovery and restoration of native estuarine species and biotic communities
  - Rehabilitate natural processes to create and maintain complex channel morphology, in-channel islands, and shallow water habitat in the Delta and Suisun Marsh
  - Create and maintain flow and temperature regimes in rivers that support the recovery and restoration of native aquatic species
  - Establish hydrologic regimes in streams to maintain channel and sediment conditions supporting the recovery and restoration of native aquatic and riparian species and biotic communities

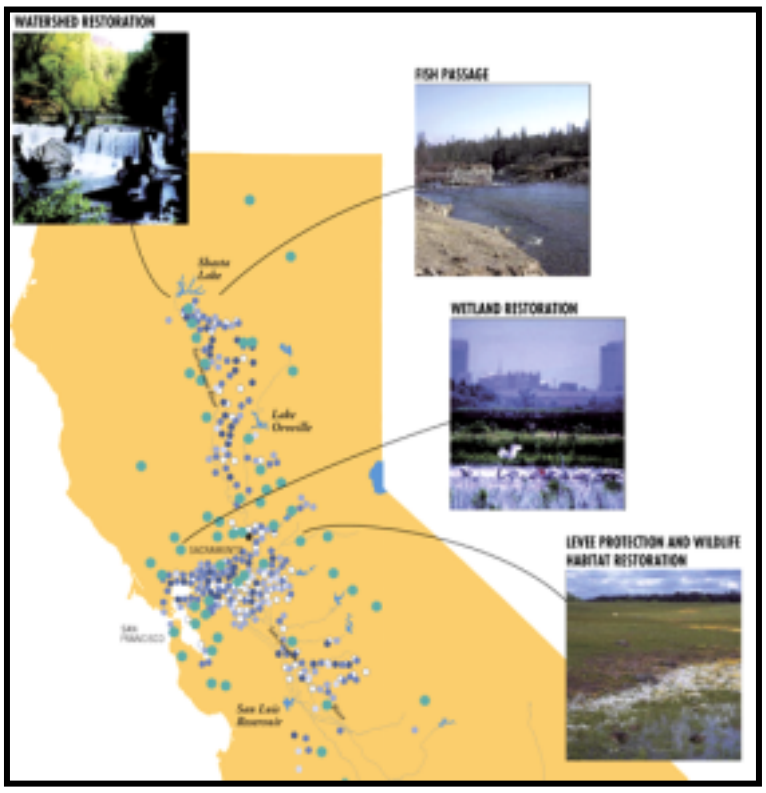
- Reestablish floodplain inundation and channel-floodplain connectivity of sufficient frequency, timing, duration, and magnitude supporting restoration and maintenance of functional natural floodplain, riparian, and riverine habitats
- Restore coarse sediment supplies to sediment-starved rivers downstream of reservoirs to support restoration and maintenance of functional natural riverine habitats
- Increase meandering reaches and other pre-1850 river channel characteristics

- **Maintain or enhance harvested species populations.**
  - Enhance fisheries for salmonids, white sturgeon, pacific herring, and native cyprinid fishes
  - Maintain fisheries for striped bass, American shad, signal crayfish, grass shrimp, and nonnative warm-water game fishes to the extent consistent with ERP goals
  - Enhance populations of waterfowl and upland game for harvest by hunting and for non-consumptive recreation to the extent consistent with ERP goals
  - Ensure that Chinook salmon, steelhead, trout, and striped bass hatchery, rearing, and planting programs do not have detrimental effects on wild populations of native fish species and ERP actions
- **Protect and restore habitats.**
  - Implement and manage restoration actions for all major habitat types to provide connectivity among habitats, in the Delta, Suisun Bay, Suisun Marsh, and San Francisco Bay
  - Implement and manage restoration actions for all major habitat types to provide connectivity among habitats, in the Central Valley and its rivers
  - Protect tracts of existing high quality major aquatic, wetland, and riparian habitat types, and sufficient connectivity among habitats in the Bay-Delta and its watershed
  - Minimize agricultural land conversion and maintain open space buffers and encourage wildlife friendly agriculture
  - Manage the Yolo and Sutter Bypasses as major areas of seasonal shallow water habitat to enhance native fish and wildlife
- **Prevent establishment of and reduce impacts from non-native invasive species.**
  - Eliminate further introductions or halting introductions of non-native species from ship ballast into the Bay-Delta estuary
  - Eliminate further introductions of new species from imported marine and freshwater baits into the Bay-Delta estuary and its watershed.

- Halt the unauthorized introduction and spread of potentially harmful non-native introduced fish species or other aquatic organisms in the Bay-Delta and Central Valley
- Halt release of non-native introduced fish and other aquatic organisms from private aquaculture, aquarium and pet trades into the Bay-Delta estuary, its watershed, and other central California waters
- Reduce the impact of non-native mammals on native birds, mammals, and other organisms
- Limit the spread or eradicate populations of non-native invasive species through focused management efforts
- Prevent a zebra mussel invasion into California

- **Improve or maintain water and sediment quality.**
  - Reduce loadings and concentrations of toxic contaminants in all aquatic environments in the Bay-Delta estuary and its watershed
  - Reduce loadings of oxygen-depleting substances from human activities into aquatic ecosystems in the Bay-Delta estuary and its watershed
  - Reduce fine sediment loadings from human activities into rivers and streams

Ecosystem Restoration Program Highlights (Years 1-3)



- **Single blueprint approach**
- **393 ecosystem projects funded for about $460 million**
- **97,000 acres of habitat protected or restored**
- **75 new or improved fish screens**
- **23 comprehensive scientific studies**
- **Contributed to meeting regulatory commitments for all Program elements**

Specific Accomplishments

Since its inception nearly seven years ago, the ERP facilitated funding for a variety of projects contributing to ecosystem restoration within the ERP's geographic scope. ERP investments contributed to sustaining regulatory assurances for all Bay-Delta Program elements in Years 1 through 3. There are at least three ways that ERP can assess its accomplishments: (1) tracking funding allocations (the focus of this discussion); (2) tracking progress toward targets; and (3) tracking progress toward specific goals or objectives. Work continues in all three areas, however, current assessment tends to focus on the funding allocations, and the ensuing discussion focuses on this approach. Currently, ERP is beginning to address how to measure progress toward targets as part of an ongoing "look back" exercise. The ERP is also in the process of identifying indicators to track progress toward specific goals and objectives. Because implementing restoration projects takes time, and because of the nature of ecosystem restoration, the ERP is approaching a time when it can now begin to identify and articulate the results of some of its projects.

Listed below is a breakdown of the 393 projects by ERP goal that have been funded as of June 2003. Because many ERP projects address more than one of the Strategic Goals, the following project numbers and percentages total more than 100 percent and more than the total of 393 projects that were funded through June 2003.

Goal 1: Recover Endangered and Other At-Risk Species and Native Biotic Communities

About 63 percent, 253 projects, address recovering endangered and other at-risk species and native biotic communities.

Goal 2: Rehabilitate Ecological Processes

About 57 percent, 229 projects, address rehabilitating ecological processes.

Goal 3: Maintain or Enhance Harvestable Species Populations

About 13 percent, 53 projects address maintaining or enhancing harvestable species populations.

Goal 4: Protect and Restore Habitats

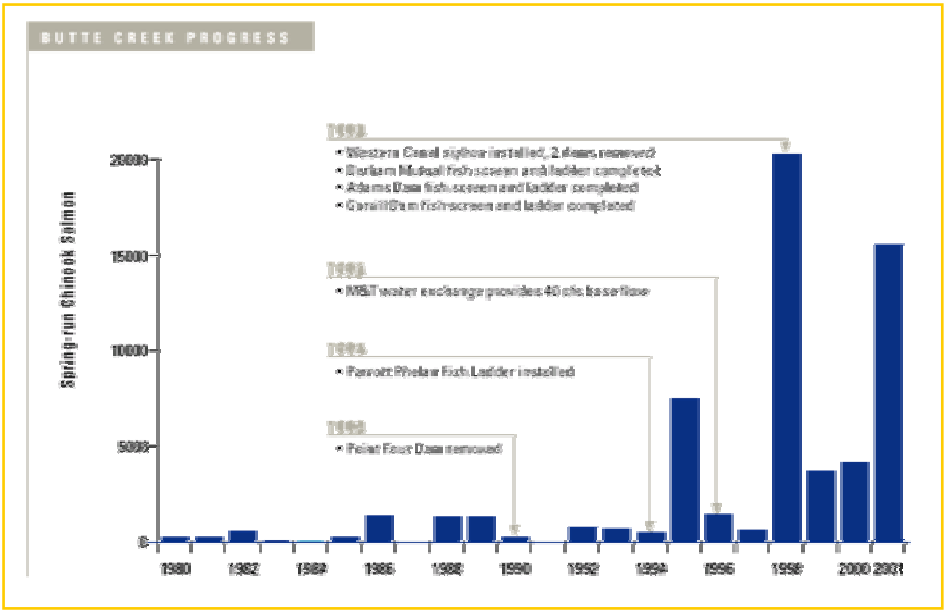
About 57 percent, 224 restoration projects, address protecting and restoring habitats.

Goal 5: Prevent Establishment of and Reduce Impacts from Non-Native Invasive Species

About 10 percent, 31 projects, address preventing establishment of or reducing impacts from non-native invasive species.

Goal 6: Improve or Maintain Water and Sediment Quality

About 30 percent, 117 projects, address improving or maintaining water and sediment quality.



Returns of Spring-Run Chinook Salmon on Butte Creek

Water Supply Reliability Goals and Objectives

Storage Program and Record of Decision Commitments

The goal of the Storage Program is to expand storage capacity to increase operational flexibility and water supply reliability in an effort to improve water quality and support fish restoration efforts.

The CALFED Record of Decision (ROD) identified six commitments to be met. For each ROD commitment, key objectives have been identified for the Storage Program:

Development of approximately 250 TAF of In-Delta Storage

- Provides fishery benefits and enhances water project flexibility
- Could be achieved through implementation of a re-engineered in-Delta storage project that will meet the ecosystem needs in the Delta and provide water supply reliability
- State and Federal agencies will make a decision regarding the feasibility of an In-Delta storage project and the appropriateness of initiating negotiations with Delta Wetlands owners or other appropriate landowners for acquisition of necessary property
- State and Federal agencies will develop a project plan that addresses local concerns regarding effects on neighboring lands and complete any additional needed environmental documentation

Enlargement of Shasta Lake storage by approximately 300 TAF

- Increases the pool of cold water available to maintain lower Sacramento River temperatures needed by anadromous fish
- Provides other water management benefits, such as water supply reliability
- To the extent possible, includes features to benefit other identified ecosystem, flood control, and related water resources needs

Expansion of Los Vaqueros Reservoir by up to 400 TAF

- Provides water quality and water supply reliability benefits to Bay Area water users
- Department of Water Resources (DWR) and U.S. Bureau of Reclamation (USBR) are working with Contra Costa Water District (CCWD) and interested stakeholders to assure that previous commitments, including local voter approval required for expansion, are respected

Development of up to 1.9 MAF of North-of-the-Delta Offstream Storage

- Enhances water management flexibility in the Sacramento Valley while reducing diversions on the Sacramento River during critical fish migration periods
- Increases reliability of supplies for a significant portion of the Sacramento Valley
- Provides storage and operational benefits for other California Bay-Delta Programs, including water quality and the Environmental Water Account

Development of 250 TAF to 700 TAF of Storage in the Upper San Joaquin River Basin

- Contributes to restoration of and improved water quality for the San Joaquin River
- Facilitates conjunctive management and water exchanges that improve the quality of water deliveries to urban communities
- Improves CVP water supply reliability south of the Delta
- Increases flood protection in the San Joaquin Valley
- Increases power generation

Groundwater Conjunctive Management Projects with Total Capacity of 500 TAF to 1 MAF

- Increases water supply reliability statewide through the planned, coordinated local management and use of groundwater and surface water resources
- Develops a basic understanding of individual groundwater basins
- Identifies basin management strategies and objectives
- Plans and conducts groundwater studies
- Designs and constructs conjunctive use projects

Each of these commitments is being assessed individually and in coordination with one another to ensure consistent assumptions, review, and coordination with other California Bay-Delta Program goals.

Water-Use Efficiency Program and ROD Commitments

The goal of the Water Use Efficiency (WUE) Program is to advance the implementation of cost-effective water conservation and recycling practices throughout the State that contribute to California Bay-Delta Program water supply reliability, water quality, and ecosystem restoration goals. These practices include agricultural water conservation, urban water conservation, water recycling, and wetlands water management.

The CALFED Record of Decision (ROD) identified several WUE commitments which fall into four broad implementation categories:

- **Assurances, Science, Monitoring, and Evaluation**
  - Provide credible assurances to policy-makers and stakeholders that the WUE Program is being implemented aggressively and in accordance with the ROD.

- Support and inform sound water management decisions.
- Verify results of WUE actions.
- Develop quantified performance measures (including agricultural quantifiable objectives).
- Engage in adaptive management.

- **Water Conservation and Recycling Loans and Grants**
  - Facilitate implementation of WUE actions at the local level – by cities, water suppliers, and farmers.
  - Use state and federal grants to help local entities implement WUE practices that are not locally cost effective but still contribute to California Bay-Delta objectives.
  - Use state and federal low interest loans to help local entities overcome financial barriers to WUE implementation.

- **Water Conservation and Recycling Technical Assistance**
  - Provide technical assistance to help local entities overcome technical hurdles in recycling water.
  - Support and provide outlets for scientific research, public awareness on water recycling production and use.
  - Develop partnerships with local and regional entities to: (1) assess the costs, benefits, and feasibility of potential WUE projects; (2) determine the best approach to implement WUE actions; (3) effectively prepare grant and loan applications; and (4) comply with WUE reporting requirements (e.g. related to urban water conservation certification).

- **Oversight and Coordination**
  - Provide guidance to WUE implementing agencies in interpreting the ROD.
  - Employ methods of informal communications, such as staff-level meetings and conference calls with agency staff dissemination of information.
  - Engage in formal communications as necessary, such as reports to the California Bay-Delta Authority, the Bay-Delta Public Advisory Committee, and the WUE Subcommittee.

Water Transfer Program and ROD Commitments

The goal of the Water Transfer Program is to encourage the development of a more effective water transfer market that facilitates water transfers and streamlines the approval process while protecting water rights, environmental conditions, and local economic interests.

The CALFED Record of Decision (ROD) identified three commitments to be met. For each ROD commitment, key objectives have been identified for the Water Transfer Program:

- **Increase the availability of existing facilities for water transfers.**
  - Improve capacity estimates of state or federal conveyance facilities.
  - Improve predictability of associated wheeling costs.
  - Develop a mechanism for estimating carriage water requirements on a real-time basis.
  - Develop rules for reservoir refill.
- **Lower transaction costs through permit streamlining.**
  - Identify measures to streamline transfer approval processes of jurisdictional agencies.
  - Continue defining transferable water associated with crop idling.
  - Identify potential impacts to third-parties and develop mechanisms for appropriate compensation.
- **Increase availability of market information to stakeholders and permitting agencies.**
  - Continued operation of the On-Tap database and Water Transfer Information Clearinghouse.

Conveyance Program and ROD Commitments

The goal of the Conveyance Program is to identify and implement water conveyance modifications in the Delta that will:

- Improve water supply reliability for in-Delta and export users
- Support continuous improvement in drinking water quality
- Complement Delta ecosystem

The CALFED Record of Decision (ROD) identified three commitments to be met. For each ROD commitment, key objectives have been identified for the Conveyance Program:

- **South Delta Actions** – to increase State Water Project (SWP) and Central Valley Project (CVP) export capability, improve the Delta ecosystem through fish protective measures, and ensure that local in-Delta agricultural water needs are met.
  - Increase SWP pumping from the current limit to 8,500 cubic feet per second (cfs) from March 15 to December 15, and modify existing pumping criteria from December 15 to March 15, to allow greater use of SWP export capacity and the installation of permanent operable barriers in the south Delta.
  - Increase SWP pumping to the maximum capability of 10,300 cfs.
  - Increase fish protection by improving fish screening at CVP and SWP export facilities.
  - Design and construct floodway improvements on the lower San Joaquin River to provide conveyance, flood control and ecosystem benefits.
  - Reduce agricultural drainage from Veale and Byron Tracts in the Delta.
- **North Delta Actions** – to improve flood protection and conveyance facilities, water quality, Delta fisheries, and avoid water supply disruptions, to increase the water supply reliability for the SWP and CVP and to enhance the Delta ecosystem.
  - Evaluate and implement improved operational procedures for the Delta Cross Channel (DCC) to address fishery and water quality concerns.
  - Simultaneously evaluate a screened through-Delta facility on the Sacramento River of up to 4000 cfs.
  - Design and construct floodway improvements in the North Delta to provide conveyance, flood control, and ecosystem benefits.
- **Delta Mendota Canal/California Aqueduct (DMC/CA) Intertie Actions –** to consider the need for two specific DMC/CA intertie projects which physically connect the SWP and CVP facilities.
  - One connection would occur between the Delta Mendota Canal and California Aqueduct west of the City of Tracy.
  - One connection would be an intertie between the CVP intake facility and the SWP's Clifton Court Forebay with a corresponding increase in the capacity of the Forebay's screened intake.
- **Complimentary Actions –** objectives that were not analyzed in the final Programmatic EIS/EIR.
  - The Temporary Barriers Project will seasonally install up to three rock flow control structures and one rock fish control structure in south Delta channels at various times through 2007, or until permanent flow control structures are constructed under the South Delta Improvements Program (SDIP).

- Take additional actions to protect navigation and protect local diverters in the South Delta who are not adequately protected by temporary barriers as part of the Temporary Barriers Project.
- Evaluate a bypass to the San Felipe Unit at the San Luis Reservoir to increase the operational flexibility of storage in San Luis Reservoir and ensure a high quality, reliable water supply for San Felipe Division contractors potentially at risk due to "low point" water levels in the San Luis Reservoir.
- Facilitate water quality exchanges and similar programs to make high quality Sierra Nevada water in the eastern San Joaquin Valley available to urban Southern California interests.
- Implement a Sacramento and San Joaquin Comprehensive Study to improve the flood control efforts from the Sacramento and San Joaquin Rivers out to the San Francisco Bay.

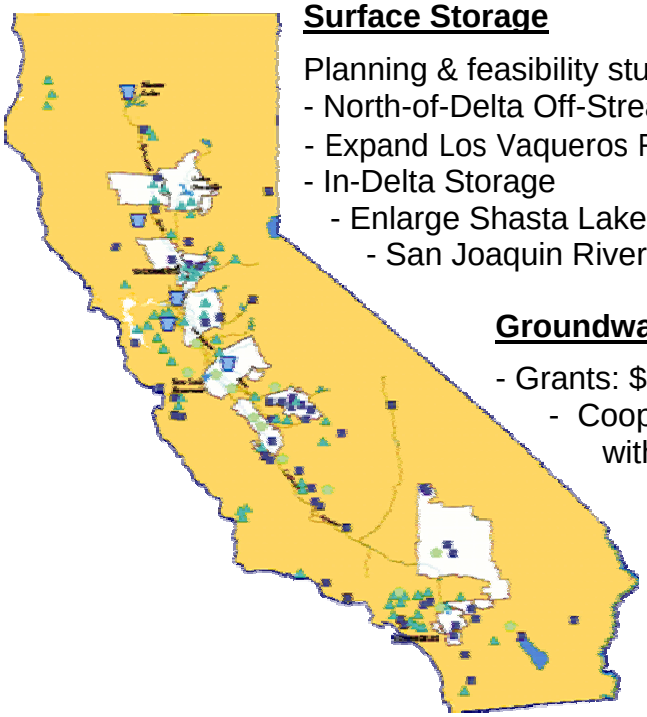
Environmental Water Account and ROD Commitments

The Environmental Water Account (EWA) has been established to provide water for the protection and recovery of at-risk fish species beyond water available through existing regulatory actions related to the operations of the State Water Project (SWP) and the Central Valley Project (CVP). EWA's purpose is to provide protection to the at-risk fish species of the Bay–Delta estuary through environmentally beneficial changes in SWP/CVP operations at no uncompensated water cost to the projects' water users. This approach to fish protection requires the acquisition of alternative sources of project water supply, called the "EWA assets," that are to be used to augment streamflows, Delta outflows, to modify exports, to provide fishery benefits, and to replace the regular project water supply interrupted by the changes to project operations.

The CALFED Record of Decision (ROD) provided a commitment, subject to specified conditions and legal requirements, that for the first four years of Stage 1, there will be no reductions, beyond existing regulatory levels, in CVP or SWP Delta exports resulting from measures to protect fish under Federal or State endangered species acts. This commitment is based on the availability of three tiers of assets:

- Tier 1 is baseline water. The regulatory baseline consists of the biological opinions on winter-run salmon and delta smelt, 1995 Delta Water Quality Control Plan, and 800 TAF of CVP Yield pursuant to CVPIA Section 3406(b)(2).
- Tier 2 consists of the assets in the EWA combined with the benefits of the ERP and is an insurance mechanism that will allow water to be provided for fish protection and recovery when needed, without reducing deliveries to water users.
- Tier 3 is based upon the commitment and ability of the State and Federal Agencies to make additional water available should it be needed. In March 2002, the State and Federal Agencies prepared an implementation strategy for Tier 3, establishing a timely scientific panel process and identifying tools and funding should implementation of Tier 3 prove needed.

Water Reliability Program Highlights (Years 1-3)



Surface Storage

Planning & feasibility studies:
- North-of-Delta Off-Stream Storage
- Expand Los Vaqueros Reservoir
- In-Delta Storage
  - Enlarge Shasta Lake
    - San Joaquin River

Groundwater Storage

- Grants: $170M (200 TAF/yr)
  - Cooperative Agreements with local agencies

Water Use Efficiency

- Conservation: Grants $59M (41 TAF/year)
- Recycling: Grants $57M (36 TAF/year)

Specific Accomplishments – Storage

Development of 250 TAF of In-Delta Storage

- DWR and USBR completed a joint planning study, including pre-feasibility evaluation of alternatives.
- Released the In-Delta Storage Program Draft Summary Report and supplemental reports on operations, water quality, engineering, environmental and economic evaluations in May 2002.
- DWR and USBR continued technical studies of risk, design, operations, water quality, environmental impacts, benefits, and costs. Revised studies are scheduled for completion by October 30, 2003.

Enlargement of Shasta Lake Storage by 300 TAF

- State and Federal agencies concurred to continue with planning studies to evaluate if the proposed Shasta Lake enlargement would impact the Wild and Scenic reach of the McCloud River.
- Initiated feasibility study.

- Identified potential impacts and evaluating alternatives to avoid / mitigate impacts on the McCloud River.

Expansion of Los Vaqueros Reservoir by up to 400 TAF

- Identified potential local partners and developed agreements with CCWD and other stakeholders for necessary studies. Signed a Memorandum of Understanding (MOU).
- Initiated feasibility study.
- Completed a Draft Project Concept Report (pre-feasibility) and Executive Summary.
- Conducted initial public meetings.

Development of up to 1.8 MAF of North-of-the-Delta Offstream Storage

- Signed a joint planning MOU by 12 local water agencies and counties and five state and federal agencies.
- Filed the Notice of Preparation (NOP) at the State Clearinghouse.
- Published the Notice of Intent (NOI) in the Federal Register.
- Completed public and tribal scoping.
- Completed and released a scoping report.
- Initiated CALSIM II modeling runs of preliminary operations scenarios.
- Began work on the environmental documentation and engineering feasibility study.

Development of 250 to 700 TAF of storage in the Upper San Joaquin River Basin

- Identified surface storage options that could contribute to program objectives.
- Completed preliminary operation studies for single-purpose analysis for identified surface storage options.
- Completed a Draft Phase I in-progress report including appraisal level evaluations of surface storage alternatives.
- Held 5 public stakeholder workshops to encourage participation by interested parties in the formulation and evaluation of alternatives.
- Initiated a feasibility study.

Groundwater Conjunctive Management Projects with Total Capacity of 500 TAF to 1 MAF

- Executed an MOU with 30 local agency partners and provided technical and financial assistance to study the groundwater basins and assess opportunities for conjunctive water management.
- Provided technical and financial assistance to local partners for assessing in-basin needs, development of basin-wide planning and management strategies, project formulation, and commencement of pilot projects.

- Provided independent facilitation / mediation services to local partners to improve stakeholder involvement, foster local support for improved groundwater management, and to enhance stakeholder understanding of water resource issues and needs.
- Coordinated conjunctive water management activities in the Central Valley with the North-of-the-Delta Offstream Storage and Upper San Joaquin River Basin Storage investigations.
- Awarded $18.5 million of Water Bond 2000 (Proposition 13) funds in Year 1 and $500,000 in Year 2 to conduct feasibility and pilot studies. Awarded 15 grants and loans totaling $102.7 million for construction projects in Year 2. The estimated average annual yield of the funded projects is 130 TAF.
- Awarded $5 million of Local Groundwater Management Assistance Act (AB 303) grants to local agencies for 23 groundwater studies and projects in Year 1. Awarded 21 grants totaling $4.4 million in Year 2.
- Provided input on SB 1938, which requires, effective 1/1/03, adoption of groundwater management plans with specific components if agencies seek funding administered by DWR for groundwater projects.

Specific Accomplishments – Water Use Efficiency

Assurances, Science, Monitoring, and Evaluation

- Developed a staff draft Framework for Certification of Urban Best Management Practices (BMP) through an ad hoc stakeholder process. (Led by the California Bay-Delta Authority (CBDA); participation by DWR, SWRCB & USBR.)
- Developed and adopted the Agricultural Milestones, a process to evaluate the regional progress of agricultural water conservation and identify barriers to implementation. (Led by CBDA; participation by DWR & USBR.)
- Made progress on a draft definition of appropriate urban and agricultural water use measurement (including surface and groundwater). (Led by CBDA; participation by DWR & USBR.)
- Made progress on developing quantified WUE performance measures. Worked with the Agricultural Water Management Council to incorporate agricultural Quantifiable Objectives into the economic evaluation process for selecting agricultural efficient water management practices. (Jointly led by DWR and CBDA.)
- Worked with the Science Program to develop Science Application Advisory Committee to ensure that WUE-related work is practical while still based upon the best available science. Incorporated concepts from the Science Application Advisory Committee into the 2004 WUE Proposal Solicitation Package to improve the monitoring and evaluation of WUE projects. (Led by DWR; participation by USBR and CBDA.)

- Developed the scope of the WUE independent Science Review Panel and began recruiting panelists. (Led by CBDA; participation by DWR, USBR, and SWRCB.)

Water Conservation and Recycling Loans and Grants

- Provided financial incentives for water use efficiency by issuing sixty-nine urban water conservation grants and 23 agricultural water conservation grants for a total of 40,775 acre-feet estimated annual water savings and an expected total water savings of 754,621 acre-feet from 2001-2003. (Led by DWR; in coordination with USBR and CBDA.)
- Facilitated a water recycling stakeholder workshop. Approved a $1 million grant to the WateReuse Foundation to conduct water recycling research in 11 specified areas in 2001. Approved amendment to existing WateReuse Foundation contract and increased the contract amount to an additional $1 million in 2003. (Led by SWRCB, participation by DWR & CBDA.)
- Issued $13,569,000 in grants to water suppliers through the Water Conservation Field Services Program. (Led by USBR.)
- Reserved $600,000 of water recycling research funds for the facilitation of Recycled Water Task Force. Work will be completed June 30, 2003 with submittal of final report to the legislature. (Jointly led by SWRCB and DWR.)
- Awarded six water recycling loans totaling $72 million and committing all water recycling construction loan funds, including 1984 Bond law funds. Additionally, $20 million of State Revolving Loan funds have been committed for water recycling projects. Projects receiving loan funding contribute to a proposed increase of 36,000 acre-feet per year of recycled water. Awarded 20 water recycling grants to local agencies totaling $57 million, the total amount of water recycling construction grant funds available from Proposition 13 (includes remaining Proposition 204 funds). Projects receiving loan funding contribute to a proposed increase of 36,000 acre-feet per year of recycled water. (Led by SWRCB.)
- Made progress on developing an on-farm WUE incentive program. Held six meetings throughout the central valley to gather input from producers and others regarding the kind and administration of programs that would be of value. A final proposal will be presented to WUE in September 2003. (Led by NRCS.)

Water Conservation and Recycling Technical Assistance

- Continued to provide technical, biophysical, and engineering-oriented knowledge on water recycling and desalination issues in collaboration with the State Water Resources Control Board (SWRCB) and Department of Health Services (DHS), formed and implemented California Recycled Water Task force called for by Assembly Bill No. 331 (Goldberg). The Task Force created 6 different workgroups to tackle issues of concern. Organized 28 separate open meetings of the Task Force and its workgroups, developed 6 white papers, and prepared the draft final Task Force report. (Led by DWR.)
- Provided financial assistance to help start two new Mobile Laboratories in Tehama and Siskiyou counties. Provided financial assistance to an existing Mobile

Laboratory in Kern County to provide 25 evaluations per year outside their service area. (Led by DWR.)

- Reprinted and disseminated several water use efficiency brochures, articles and the Water Conservation News. (Led by DWR.)
- Assisted local agricultural water agencies to install seven new CIMIS weather stations. Collected, processed, analyzed, and disseminated CIMIS data and provided trouble-shooting assistance to maintain the system and resolve problems with cooperator CIMIS weather station. Contracted with the Center for Irrigation Technology for On-farm Drainage Reduction, including four workshops per year. Participated with the California Rural Water Association to present three workshops related to agricultural water conservation and irrigation. Partnered with the University of California Cooperative Extension to conduct 6 workshops on irrigation scheduling, and promoted the agricultural loan program during 6 Drought Preparedness Workshops. CIMIS participated in several workshops throughout the State to inform the public about the CIMIS program, how to utilize CIMIS data, and how to become a CIMIS cooperator. (Led by DWR.)
- Conducted urban water management plan workshops, provided technical assistance to the California Urban Water Conservation Council, published the Draft Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001, and conducted workshops on those bills throughout California. (Led by DWR.)
- Facilitated technical assistance to water suppliers and water users through the Water Conservation Field Services program (see Loans and Grants, above). (Led by USBR.)
- Established criteria for Refuge Water Management Plans and incorporated agricultural Quantifiable Objectives on Wetlands. (Led by USBR.)
- Provided technical assistance to growers throughout the state for the adoption of new irrigation equipment and improved water management techniques. (Led by NRCS.)

Oversight and Coordination

- Provided guidance to WUE agencies in interpreting the ROD and facilitated communications. Convened the WUE Subcommittee to the BDPAC. (Led by CBDA.)

Specific Accomplishments – Water Transfers

Increase the Availability of Existing Facilities for Water Transfers.

- Developed and implemented an approach to determining carriage water requirements for transfers on a real-time basis. This process was developed in coordination with the Bay-Delta Modeling Forum.
- Continued efforts to identify constraints and opportunities to convey transfer water through federal / state / local facilities.

Lower Transaction Costs Through Permit Streamlining.

- Participated in and contributed to preparing a series of papers addressing water transfers involving groundwater substitution and crop shifting / fallowing to serve as a standardized approach to evaluating transfer proposals and to assist transfer proponents in formulating proposals. These papers were developed with participation of the stakeholder community.
- Utilized the public involvement / stakeholder activities undertaken by the State Water Resources Control Board (SWRCB) in the development of the report "Water Transfer Issues in California" to identify opportunities to streamline the current permitting process.
- Coordinated with the SWRCB regarding identifying measures to be implemented that resulted from completing the stakeholder forum and the publication of the report titled Water Transfer Issues in California (SWRCB, 2002). The SWRCB is currently soliciting public comment on the applicable recommendations for subsequent SWRCB action.
- Continue to discuss and consider measures to streamline and expedite the various agency water transfer approval processes. These measures include:
    - Adopting a standard water transfer application.
    - Establish limits for processing transfer applications.
    - Establish suitable criteria for approving land idling-based transfers.
    - Clarify procedures for transfers for instream purposes under Water Code Section 1707.
- Provide financial and technical assistance for preparing groundwater management plans.
- Continued to work with the affected stakeholder community to encourage coordination of multiple transfers and identification of standard mitigation measures and thresholds to address third-party socioeconomic consequences.

Increase Availability of Market Information to Stakeholders and Permitting Agencies.

- Developed a water transfer information and database titled "On-Tap". Continued to operate the On-Tap website to facilitate information exchange regarding transfers and provide guidance regarding the regulatory approvals required by project proponents of various types of transfers.
- Department of Water Resources (DWR), SWRCB, and the U.S. Bureau of Reclamation (USBR) entered into a Memorandum of Understanding establishing their respective responsibilities for implementing the Water Transfers Information Clearinghouse.
- Implemented refinements to the On-Tap website consisting of updating the water transfer database to include current (April 2003) water transfer actions, developing and testing an on-line administrator, and developing an On-Tap User Guide and Website Manual (enabling the agencies to manage the website and database as future conditions warrant).
- Coordinated with the Environmental Justice (EJ) Program to identify and characterize third-party impacts resulting from water transfers. This effort included conducting interviews with selected members of the EJ community who demonstrated interest and concern toward water transfer impacts on third-parties.

Specific Accomplishments - Conveyance

South Delta Actions – to increase State Water Project (SWP) and Central Valley Project (CVP) export capability, improve the Delta ecosystem through fish protective measures, and ensure that local in-Delta agricultural water needs are met.

8,500 cfs and Permanent Operable Barriers (South Delta Improvements Program):

- Continued preparation of preliminary designs and the production of the Action Specific Implementation Plan (ASIP), a science symposium on the findings of the ASIP, public review of the EIR/EIS, and selection of a preferred alternative along with the CALFED Mid-Stage 1 package of actions.
- Secured the services of a meeting facilitator which helped resolve most issues regarding the project-specific operations plan.

Clifton Court Fish Screens and 10,300 cfs:

- Developed several alternative conceptual designs and cost estimates for a new intake and fish facility for Clifton Court Forebay.
- Performed preliminary engineering analyses and collected geologic information on potential intake sites.
- Initiated debris studies to improve trash rack collection efficiency at water project fish salvaging facilities.
- Formed a South Delta Fish Facilities Forum Group and a process to provide guidance and recommend priorities in the development of the Clifton Court Forebay and Tracy Fish Test Facility projects. The Forum is currently evaluating background information regarding these projects.

Tracy Fish Test Facility:

- Began evaluating alternatives for the Tracy Fish Test Facility (TFTF).
- The Tracy Technical Advisory Team met and developed plans for a TFTF.
- Awarded contracts for a traffic study and public involvement for the TFTF.
- Purchased approximately 30 acres of property adjacent to the proposed construction site to be used for construction purposes.
- Formed a South Delta Fish Facilities Forum Group and a process to provide guidance and recommend priorities in the development of the Clifton Court Forebay and Tracy Fish Test Facility projects. The Forum is currently evaluating background information regarding these projects.

Lower San Joaquin Flood Improvements:

- Continued coordinating this project with the U.S. Army Corps of Engineers and the Comprehensive Study Team.
- Evaluating opportunities for conceptual flood improvements as identified in the internal draft Comprehensive Study Lower San Joaquin River Assessment Information Report (October 2001).
- Pursuing alternative funding sources for potential concept-projects along the lower San Joaquin River, including Proposition 13 Flood Corridor Protection Program (FCPP) grant program.
- Assisting Reclamation District 2107 in the preparation and submission of an FCPP grant proposal seeking approximately $5 million for flood corridor protection, agriculture preservation, and ecosystem restoration.

Old River and Rock Slough Water Quality Improvement Projects:

- Collected and analyzed water quality samples from numerous locations in Old River and Rock Slough, evaluated sampling results, and prepared an internal draft technical memorandum.
- Surveyed project areas to identify potential drainage sources and Mapped potential drainage sources.
- Initiated comparison of preliminary analytical data to historical data.
- Developed methodology for evaluation of alternatives.
- Initiated evaluation of sources and modeling approach and development of preliminary model.
- Conducted a CALFED Veale/Byron Workgroup public meeting on May 28, 2002.
- Submitted a draft internal technical memorandum in January 2003.

North Delta Actions – to improve flood protection and conveyance facilities, water quality, Delta fisheries, and avoid water supply disruptions, to increase the water supply reliability for the SWP and CVP and to enhance the Delta ecosystem.

Delta Cross Channel Re-Operation:

- Conducted two years of studies and experiments to provide a solid basis for future operations of the DCC.
- Conducted intensive hydrodynamic and water quality monitoring of DCC tidal operations.
- Conducted juvenile/adult fish tracking studies.
- Independent Science Panel reviewed all work plans and results of first two years of studies.
- Held public workshops to present the preliminary results of the studies.

Through-Delta Facility:

- Developed an integrated DCC / Through-Delta Facility (TDF) Work Team.
- Formed a North Delta Fish Facilities Technical Team to assist in developing screening concepts for the Sacramento River 4,000 cfs intake and facility concepts for the TDF discharge into the Mokelumne River.
- Using computer models, analyzed the possible benefits of a joint DCC and TDF operation.
- Initiated three research projects to address whether adult fish species entering a TDF can be safely lifted back into the Sacramento River system.
- Commenced research at U.C. Davis regarding fish friendly trash racks that may be used on a TDF.

North Delta Flood Control and Ecosystem Restoration Improvements Program:

- Awarded a consultant contract for preparation of an EIR / EIS; drafted Chapter 1 of EIR / EIS including Purpose and Need Statement; outlined subsequent chapters; nearing completion of biological surveys.
- Constructed a regional hydraulic model to be used for alternatives analysis and completed a peer review process of the model.
- Worked with the U.S. Army Corps of Engineers (USACE) and the Reclamation Board to amend the existing feasibility study authorization to allow USACE Planning to act as federal lead agency for the project.
- Filed a joint Notice of Intent / Notice of Preparation (NOI / NOP) for the North Delta Flood Control and Ecosystem Restoration Improvements with the USACE.
- Conducted joint public scoping meetings with the USACE.
- Initiated development of technical alternatives and screening criteria for flood control and ecosystem restoration.
- Engaged North Delta Agency Team to review project permitting requirements, develop ASIP, and advise preparation of EIR / EIS.
- Identified and initiated strategies to address science uncertainties with the proposed project.
- Negotiated and initiated the processing of contracts to address science issues including sediment dynamics modeling and academic collaboration.

SWP/CVP Intertie Actions – to consider the need for two specific SWP/CVP intertie projects which physically connect the SWP and CVP facilities.

Delta Mendota Canal/California Aqueduct Intertie:

- Completed a Value Planning Study, completed CALSIM and DSM modeling studies, and initiated environmental documentation and conceptual designs.

Clifton Court Forebay/Tracy Pumping Plant Intertie:

- Formed a South Delta Fish Facilities Forum Group and a process to provide guidance and recommend priorities in the development of the Clifton Court Forebay, Tracy Fish Test Facility, and intertie projects. The Forum is currently evaluating background information regarding these projects.

Complimentary Actions – objectives that were not analyzed in the final Programmatic EIS/EIR.

Temporary Barriers Project:

- Obtained all necessary permits for continuing the project.
- Installed three portable pumps on Union Island to mitigate the effects of the barriers upstream of these diversions.
- Submitted an application to the USACE to conduct limited dredging and extend agricultural diversions, as necessary, in the south Delta area.
- Signed an agreement with a landowner on Coney Island to replace a siphon with a pump and modify the on-island distribution system.

San Luis Reservoir Low Point Improvement Project:

- DWR signed an agreement for Santa Clara Valley Water District (SCVWD) to conduct the Low Point Improvement Study.
- USBR issued a NOI for the study and contracted with SCVWD to conduct an appraisal level operational study of ways to re-operate Anderson Reservoir.
- SCVWD has accomplished the following regarding the project study:
    - Developed a project scope
    - Prepared a draft project work plan
    - Developed Goals and Objectives for the project
    - Developed a broad list of conceptual alternatives
    - Formed a Regulatory Compliance Work Group and a Stakeholder Committee to assist in project planning
    - Issued an NOP for the study in August 2002
    - Conducted public scoping meetings in August 2002
    - Completed an initial screening of approximately 80 conceptual alternatives

Oversight, Coordination, and Science:

- The California Bay-Delta Program provided general oversight to assist in meeting the goals and objectives of the Conveyance Program, ensure integration with other programs, and provide Science support, where necessary.
- DWR managed the overall Conveyance Program.

Specific Accomplishments – Environmental Water Account

In the first two years and part of the third year, the concept of the EWA as presented in the CALFED ROD has become a reality in providing additional protection to sensitive Bay / Delta fish species and obtaining the ESA commitments to stabilize the water supplies of the SWP and CVP.

Although 2002 was a dry year, both SWP and CVP allocations to their users south and west of the Delta were at least 70 percent of contractor requests by late summer. Despite various challenges EWA has faced through the past two and a half years, its accomplishments have been significant. For example, EWA provides the Project and Management Agencies the ability to plan in advance for operations changes taken to protect fish. This "proactive" (as opposed to reactive) approach to resource protection not only reduces conflict and uncertainty, it permits more timely responses and helps to avoid crisis management. With EWA, time is not lost negotiating the scale, duration, or timing of an operations response, or in weighing of possible project impacts (since EWA compensates for them).

The specific, year-by-year accomplishments of the EWA program are summarized below.

Year 2001

- The Environmental Water Account obtained water through purchases and operational arrangements and used it to replace project supplies lost during pumping curtailments for fish, thus preserving water supply reliability.
- Stream habitat was improved when release of EWA water from an upstream reservoir coincided with a habitat need.
- Water was released from river level outlets, bypassing the powerhouse at Folsom Dam to improve salmon spawning conditions and provide suitable water temperature for over-summering juvenile steelhead in the lower American River; EWA compensated for the lost generation.
- ESA-related commitments for continued operation of the CVP and SWP were provided based on a functional EWA and $150 million in Ecosystem Restoration Program funding.

Year 2002

- The Environmental Water Account obtained water through purchases and operational arrangements and used it to replace project supplies lost during pumping curtailments for fish, thus preserving water supply reliability.
- Stream habitat was improved when release of EWA water from an upstream reservoir coincided with a habitat need.
- Water was released from river level outlets, bypassing the powerhouse at Folsom Dam to improve salmon spawning conditions and provide suitable water temperature for over-summering juvenile steelhead; EWA compensated for the lost generation.

- Partnered with the State Water Project contractors in a 2:1 Exchange Agreement to protect some EWA assets in San Luis Reservoir that would have been lost due to the reservoir filling. The contractors received water to augment their supplies in March and returned half of this amount to the EWA after the high point in San Luis Reservoir storage in April, thus preserving the returned EWA water for fish protection actions.
- Facilitated an increase in the allocation to south-of-Delta agricultural CVP contractors through coordinated management of EWA and (B)(2) water that ultimately resulted in a 70 percent allocation.
- Continued coordination between the Management Agencies and Project Agencies to maximize opportunities to obtain and use EWA assets for fishery benefits.
- ESA-related commitments for continued operation of the CVP and SWP were provided based on a functional EWA and $150 million in Ecosystem Restoration Program funding.

Year 2003

- The Environmental Water Account obtained water through purchases and operational arrangements and used it to replace project supplies lost during pumping curtailments for fish, thus preserving water supply reliability.
- ESA-related commitments for continued operation of the CVP and SWP were provided based on a functional EWA and $150 million in Ecosystem Restoration Program funding.

The following table summarizes the level of EWA purchases and variable assets that were obtained in 2001, 2002, and 2003 respectively. In the first two years, the EWA has achieved over 530 TAF of actions to better protect fish and improve habitat and purchased over 550 TAF of water to replace the water used to implement these actions.

EWA ASSETS ACQUIRED IN 2001, 2002 AND 2003

Assets Acquired	2001 (Dry Year) (TAF)	2002 (Dry Year) (TAF)	2003* (Above Normal Year) (TAF)
Purchases Upstream Of Delta			
State	+105	+135	+ 70
Federal	0	+ 7	0
Conveyance and Carriage Costs	- 17	- 31	- 14
Purchases South Of Delta			
State	+159	+ 37	+145
Federal (in kind in 2001)	+ 72	+ 60	0
Subtotal	**=319**	**=208**	**=201**
Operational	+ 55	+19 (Net)	+ 54 (Net)
Total	**=374**	**=227**	**=255**
Fish Actions	- 290 (290 State/ 0 Fed)	-280 (208 State/ 72 Fed)	-315 (290 State/ 25Fed)
Carryover to 2002	= 84	+84	
Carryover to 2003		=31	+ 31
Carryover to 2004			= -29
Source Shift Activation	50 of 100	0 of 100	0 of 100

* Estimated quantities since 2003 is only about half over.

Watershed Program Goals and Objectives

Goals of the Program and Record of Decision Commitments

The purpose of the Watershed Program is to aid in achieving the overarching goals of the California Bay-Delta Program, by working with local communities at the watershed level.

The CALFED Record of Decision (ROD) identified two commitments to be met by the program.

Establish a grant program to solicit, evaluate and fund local projects that contribute towards achieving California Bay-Delta Program goals.

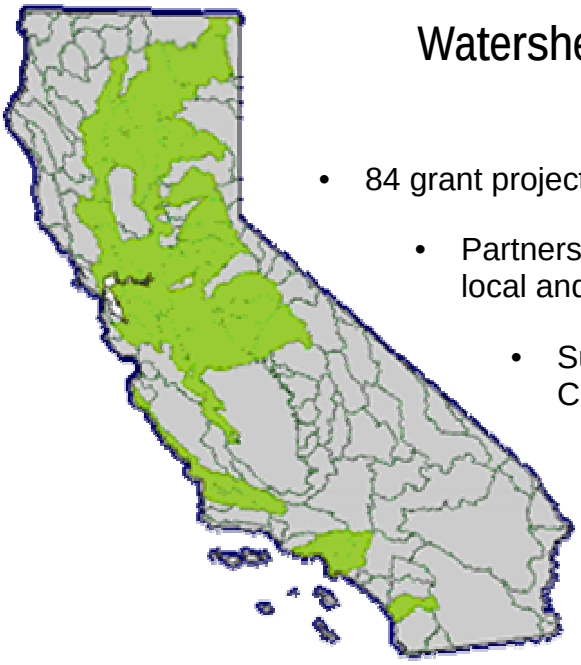
Develop Watershed program performance measures and monitoring protocols consistent with the Science Program.

In addition to these two major commitments, the program has and will continue to carry out a range of program activities designed to achieve the following broad goals and objectives:

Provide assistance, both technical and financial, for watershed activities that help achieve the mission and objectives of the California Bay-Delta Program as a whole.

Promote collaboration and integration among existing and future watershed programs at all levels.

- Help develop, adopt, and apply watershed monitoring and assessment protocols at the watershed level.
- Integrate the watershed program with other California Bay-Delta Program efforts.
- Better define and determine the relationships between watershed processes and the goals and objectives of the California Bay-Delta Program.
- Facilitate, and improve coordination, collaboration, and assistance among government agencies, other organizations, and local watershed groups.
- Support focused education and outreach efforts.
- Implement a strategy that will ensure support and long-term sustainability of local watershed management efforts.



Watershed Program Highlights (Years 1-3)

- 84 grant projects to 50 community based
- Partnership Seminars have trained 80 local and agency personnel
- Support for 20 Watershed Coordinators

Funded Grants

Specific Accomplishments

Provide assistance, both technical and financial, for watershed activities that help achieve the mission and objectives of the California Bay-Delta Program as a whole

- All 54 projects receiving awards from the Watershed Program's 2000-2001 are now under contract and have begun work.
- Awarded an additional 30 grants in the 2001-2002 program. This program was carried out using a "Consolidated Request for Proposals" (RFP) package, which solicited proposals for the California Bay-Delta Program Watershed and Drinking Water Programs, and the SWRCB's Non-Point Source, Coastal Non-Point Source, and Watershed Protection programs. To date, no contracts have been issued for the awarded projects.
- Created 16 technical positions in fiscal year 2000-2001 for Department of Water Resources (DWR), Department of Fish and Game (DFG), California Department of Forestry (CDF), and California Department of Food and Agriculture (CDFA). Filled 5 of the 16 technical positions that were approved and funded.
- Made available $1.25 million in 2001-2002 to the Department of Conservation (DOC) to allow DOC to continue providing its Watershed Coordinator Grants Program to Resource Conservation districts (RCDs). The funding will continue to support approximately 17 RCD Watershed Coordinators within the California Bay-Delta Program solution area.

- Funded and hosted two Watershed Partnerships Seminars in California (during September 2001 and April 2003). The 70+ participants were chosen from among publicly solicited nominations.
- Program funding was provided to CDF in 2001-2002 to complete baseline forest and rangeland vegetation mapping and classification for Central Valley watersheds. In 2002-2003, CDF directed program funding toward the development of a Regional Watershed Assessment Manual for the Sierra and Westside tributaries.

Promote collaboration and integration among existing and future watershed programs at all levels

- The BDPAC Watershed subcommittee held several regional meetings (in Modesto, Los Angeles, Cache Creek, and the Mokelumne River) to outreach with potential partners and others interested in the California Bay-Delta Program.
- The California Bay-Delta Program Watershed and Drinking Water Program, in partnership with the State Water Resources Control Board (SWRCB), hosted numerous pre-solicitation and mid-solicitation workshops as a part of the consolidated RFP process, to inform applicants of program interests, goals, objectives, and priorities.
- DWR and EPA have reconvened the Interagency Watershed Advisory Team (IWAT), with a primary purpose to assist the Watershed Program to develop and update program plans and increase the involvement of science into the program. IWAT has been responsible for developing the current Multi year and Program plan.

Science Goals and Objectives

Summary of Progress Against Select ROD Milestones

ROD Milestone*	Comment
Appoint an independent science board for the CALFED Program as a whole by the middle of 2001.	Completed
Appoint an independent science panel for the EWA by the middle of 2001.	Completed; Annual review held since Oct 2001
Coordinate existing monitoring and scientific research programs.	Ongoing, see below for status
Refine the set of ecological, operational and other predictive models that will be used in the evaluative process by the end of 2001.	Ongoing, see performance measure and issue-specific activities below
Establish performance measures and indicators, and a consistent strategy of on-going development of these, for each of the program areas.	Ongoing, see performance measure section below
Develop an annual science report, format and content, which includes: A. Status of the species and effectiveness of efforts to improve conditions, including EWA, ERP and water management strategies, and provide recommendations to maximize fishery benefits while minimizing impacts to water supply. B. Assessment of progress and effectiveness of each program element as indicated by performance measures and indicators. C. Complete feasibility study to establish and construct CALFED Science Center. D. Recommended research and/or program adjustments. E. Prepare first annual report by the end of 2001.	A. Ongoing, see description of issue-specific activities related to water operations and biology B. Ongoing, see performance measure section C. Progress is being made through the Bay Delta Science Consortium D. Ongoing, included in organization of science advisors and a range of research agendas developed through activities related to water operations and biology E. Completed

*Note that these ROD milestones represent a partial summary of Science Program goals and responsibilities described in the ROD.

Program Highlights (Years 1-3)

Progress during the first three years of the Science Program included:

- An intensive effort to clarify and improve the state of knowledge on a number of specific, central issues;
- Establishing a practice of seeking external peer review and advice;
- Initiating the use of public workshops as forums to publicly discuss complex technical issues;
- Developing a common methodology for assessing performance at different scales;
- Developing a strategy for monitoring program design and implementing a pilot monitoring program for wetlands restoration;
- Providing ongoing advice to individual program elements; and
- Developing and implementing a basic organizational design for integrating science throughout the California Bay-Delta Program.

Specific Accomplishments

During the first three years, the Science Program engaged in an intensive effort to clarify the state of knowledge on a number of specific scientific issues central to Bay-Delta Program decisions.

Selected Science Program Activities During Years 1-3 Related to Specific Issue Areas	
Issue	**Activities**
Splittail life history, population dynamics, relations between habitat, flow, population, and potential threats	ERP initiated white paper; Science Program conducted public review of draft at workshop, Jan 2001; studies addressing splittail and floodplain habitat uncertainties initiated
Delta Salinity Responses to Physical Channel Configuration Changes and Operations	Convened workshop on Suisun Marsh levee breach: salinity responses June 2001; funded Delta hydrodynamics study; co-funded Delta Cross Channel hydrodynamic studies
Salmon life history, population dynamics, relations between habitat, flow, population, take, direct and indirect mortality, and potential threats	Initiated an annual workshop to review water operations and environmental water management-related questions; prepared science agenda translating management questions into focused study topics; facilitated discussion of these technical issues in many forums, including the annual EWA review, and the planned (June '03) symposium on OCAP biological assessments.
Delta smelt life history, population dynamics, relations between habitat, flow, population, take, direct and indirect mortality, and potential threats	Initiated an annual workshop to review water operations and environmental water management-related questions; funded completion of white paper and otolith studies; facilitated discussion of these technical issues in many forums, including the annual EWA review, and the planned (June '03) symposium on OCAP biological assessments; supported development of research agenda by IEP workgroup.

Selected Science Program Activities Years 1-3 (cont.)	
Issue	**Activities**
Delta water quality	Reviewed baseline water quality analysis for Drinking Water Program; funded additional analysis of existing water quality data; reviewed In-Delta storage project water quality assessment; provided technical advice to drinking water program on science strategies.

Performance Measures

The Science Program has developed a template to guide performance measure selection and development throughout the Bay-delta Program based not only what had already been accomplished by the agencies, but on what has and has not worked well in programs ranging from similar water management and restoration efforts to business models for sustainability. This template explains how to:

- Build program-wide assessments from a combination of project, regional / classes of projects, and system-wide measurements
- Focus monitoring on controlling factors that are expected to change, actually measurable in the field, and directly attributable to specific Bay-Delta actions
- Choose indicators that best meet *both* program goals *and* are based on realistic data requirements from a list of desirable measurements

A draft set of prototype performance measures were then developed using this template by a Science Program consultant working directly with agency staff directly involved in the Ecosystem Restoration, Levee, Drinking Water Quality, and Water Management programs. These draft prototypes represent indicators that could be described based on currently available data (ie. not requiring additional or immediate staff time for data analysis)—in other words they represent what can be said right now, and are a test of the utility of the Science Program's template. As more robust indicators are developed, they can be added to or substituted for the prototypes in the portfolio.

As with all scientific products, we are subjecting both the template and the prototype indicators to a peer review process. We have already received a number of significant comments from within the Bay-Delta Program community and will have addressed those for the prototypes by June 2003. It is important to note that many of the comments consistently highlight data gaps that need to be filled in order to support more robust indicators for tracking complex processes such as population-level changes. After completing revisions to the prototypes, the Science Program will publish them as examples, and use them to help explain what the technical expectations are for performance measures developed by individual programs and to provide a clear and consistent charge to the Executive Science Board which will be responsible for them.

Monitoring & Data Management Strategy and Activities

Monitoring is critical both for assessing changes effected by Bay-Delta Program actions and for real-time water and resource management. The Science Program has engaged in a number of activities aimed at enhancing existing monitoring efforts, providing guidance to California Bay-Delta Program elements on monitoring design and program objectives, and, in conjunction with the Ecosystem Restoration Program, filling a critical gap in monitoring the effects of tidal wetland restoration in the Bay and Delta system.

Science Program Monitoring and Data Management Strategies and Objectives	
Guidance on Monitoring Program Design	• Design monitoring to support explanations; assessment will follow • Define gaps and indicators based on specific management questions • Address scale in time and space • No cookie cutter protocols
Enhance and Refine Existing Monitoring Programs	• Schedule periodic review of existing monitoring (~5 years) • IEP's review of its Environmental Monitoring Program is example of high quality review and mid-course adjustment • Use external experts in review
Data Management Strategy	• Expect multiple, distributed databases • Use common language to facilitate cross-database analyses • Fund data analyses as means to link databases

During the first three years of the program, Science Program staff have been working towards these objectives through a number of different activities, including:

- Providing general advice to California Bay-Delta Authority and implementing agency staff on monitoring design and, where possible and appropriate, providing expert advice on specific projects when a science advisor or member of a standing science board has time available to do so;
- Forming a team of investigators to conduct a pilot monitoring effort of tidal wetland restoration in the Bay and Delta aimed at describing the effects of restoration on ecosystem processes;
- Ongoing coordination with IEP to support and enhance data analyses, periodic subprogram reviews, cross-institutional collaboration, and development of research agendas to support critical Bay-Delta Program information needs; and
- Support of the Bay Delta Science Consortium

Program Delays

Despite the progress made during the first three years, several significant delays and institutional obstacles have hampered full implementation of the Science Program. The most significant delay has been caused by contracting and fiscal issues. In most cases, the time taken to process contracts with other state agencies and public entities has ranged from 16 to 24+ months. As a result, many program activities related to performance assessment, data analyses, and work conducted by standing Science Boards were delayed by approximately 1 ½ years. While work is progressing, there are still a number of outstanding systemic issues that will continue to hamper progress and are likely to cause additional delays in the future. Core remaining contracting issues are:

- The lack of an established system for securing external peer review and advice from independent scientists. The current contracting process is structured to provide services in an open, competitive environment. For many reasons, it is inappropriate to competitively select scientific reviewers, but no process exists for sole source agreements with individuals serving on review panels.
- Continued and protracted disagreement between state agencies and the University of California (and other public educational institutions) over standard contract terms, including rights in data, and conflict of interest. These disagreements have resulted in delays of up to 1 year or more in many contracts. Involving educational institutions in science efforts is critical to the success of the science effort within the Program and these disagreements jeopardize progress.
- Fiscal issues that arise because of the mismatch between the time funds are appropriated (there is a 3-year time limit on expenditure of some state appropriations) and the time when work can actually begin after a contract is executed (since it has taken over 1.5 years to execute all contracts).

The ROD milestone of appointing a Program-wide science board (originally scheduled for June of 2001) was postponed until the system of standing boards and panels (see section below on Program Organization for a more complete description) the relationship between the different groups was tested using the EWA Review Panel and the ERP Independent Science Board in conjunction with Technical Review Panels convened during 2000-20003 to address critical, immediate scientific issues. The Lead Scientist will be bringing a suite of nominations for the Executive Science Board to the Authority for confirmation in August, 2003.

The other ROD milestones are ongoing program objectives, the status of which is described in more detail in the sections above.

In addition to implementation delays, there are also a significant number of scientific issues and requests for workshops and reviews that can not be addressed at current budget levels.

Oversight & Coordination Goals and Objectives

Goals of the Program and Record of Decision Commitments

Oversight and Coordination provides for the integration and cross-program activities associated with implementation of the Bay-Delta Program. In addition, Oversight and Coordination supports the infrastructure of the California Bay-Delta Authority (CBDA) and its staff, including legal, contracts, fiscal, human resources and staff support, and information technology / data management.

The CALFED Record of Decision (ROD) identified eight commitments to be met. For each ROD commitment, key objectives have been identified for Oversight and Coordination of the Bay-Delta Program:

- **Public affairs/public involvement**
  - Foster understanding and support for the Program.
  - Support overall Program objectives as well as individual Program elements.
  - Create consistency across the Program through visual and written information.
- **Environmental justice**
  - Develop and implement strategies to meet annual and multi-year objectives listed as Environmental Justice activities under Program Plan.
  - Ensure meaningful and substantive participation of community-based organizations and environmental justice groups in California Bay-Delta Program planning, Program implementation, and decision-making processes.
  - Develop and implement a California Bay-Delta Program-wide environmental justice education and technical assistance program.
  - Develop tools and capacity of State and Federal agencies and staff to identify, understand, and evaluate environmental justice issues.
  - Develop environmental justice goals and objectives for each program area, including identifying and developing specific methods to address and mitigate environmental justice impacts.
  - Collect and analyze additional geographic information to assist in the identification of impacts.
  - Ensure effective participation on technical and advisory workgroups by members of potentially affected and / or adversely impacted populations.

- **Program-wide performance and tracking**
  - Track the progress of program projects and activities and assess overall schedule and funding performance of the California Bay-Delta Program.
  - Provide data to effectively review and modify, as needed, the program's timelines and activities to meet the California Bay-Delta Program's overall goals and objectives.
  - Review and report annually state and federal funding for each of the program elements.
- **Regional coordination**
  - Provide assistance to the Program elements related to integration of their efforts.
  - Provide outreach relative to the California Bay-Delta Program on a regional level.
  - Seek input from regional efforts on what the regional needs are and how the California Bay-Delta Program can help address these needs.
- **BDPAC**
  - Provide assistance and advice to the Bay-Delta Public Advisory Committee and its various subcommittees; host meetings, prepare materials and schedule speakers.
  - Advise and make recommendations on issues related to the Program and any of its processes, projects, or programs.
- **Finance plan**
  - Develop options and recommendations for long-term financing of the California Bay-Delta Program.
- **Water management strategy**
  - Maximize the use of available water supplies through water conservation and recycling and through water quality improvements.
  - Increase the flexibility of water systems at the state, federal, and local levels through improvements in conveyance, storage, and water project operations.
  - Develop groundwater and surface storage projects to increase water supply flexibility and reliability.
- **Tribal relations**
  - Secure the services of a California Bay-Delta Program tribal coordinator who will prepare a plan for promoting and coordinating tribal relations.

Specific Accomplishments

Public Affairs/Public Involvement

- Created three annual reports, prepared news releases and printed materials, sponsored events and briefings. Completed revising the website.

Environmental Justice

- An EJ Coordinator was hired in November 2002. The EJ Subcommittee (EJSC) had its original multiyear workplan approved by the BDPAC in March. EJSC meetings were conducted in Richmond with others scheduled for San Francisco, Los Angeles, Chico, Lake County, and the San Joaquin Delta. The EJSC hosted a forum to discuss a draft California Bay-Delta Program Mercury Strategy document with one of its principal authors. An EJ library, with books, videotapes and training materials was created to provide resource materials to CBDA staff, agency partners and EJSC stakeholders. A "standard" EJ presentation, specific to the California Bay-Delta Program efforts, was designed by/for use of Coordinator and other EJSC stakeholders. Coordinator attended EPA's five day EJ trainer-of-trainers workshop and has participated in three trainings to date. EJ and Watershed subcommittees have forged a close working relationship based on mutual interests and concerns of respective stakeholders. Presentations about EJ activity in the California Bay-Delta Program have been made at the DWR-sponsored Recycled Water Task Force (April) , the Planning and Conservation League's Annual Workshop (April), the Southern California Dialogue Meeting (May), and several other local and/or community based group functions. The Environmental Justice Sub Committee (EJSC) agreed to actively participate in a project designed to address issues related to mercury contamination and fish consumption in the solution area. The EJSC would focus on efforts to maximize effective outreach, participation, and involvement of potentially affected communities in the California Bay-Delta Program strategy and process. An EJ list-serve was created to respond to specific EJ concerns.

Program-Wide Performance and Tracking

- Produced California Bay-Delta Program Tracking Reports. Focused on five of the 11 Program Elements: Storage, Conveyance, Ecosystem Restoration, Watershed, and Drinking Water Quality.
- Held meetings to coordinate and gather data with program and budget staff from state, federal, and local entities.
- Developed and enhanced the content, format, and function of the program tracking data worksheets to improve consistency, accuracy, reliability, and ease of reporting. Transitioned from monthly to annual reporting.
- Formed a transition team in December 2001 to analyze the California Bay-Delta Program Tracking and develop a more cost-effective method.
- Developed Memoranda of Understanding (MOUs) with U.S. Bureau of Reclamation (USBR) and Department of Water Resources (DWR) to coordinate collection, analysis, and reporting of federal and state program tracking data.

Regional Coordination

- Regional coordinators have been identified for all five regions. Funding has been provided to two regional forums: the Southern California Water Dialogue and the Association of Bay Area Governments (ABAG) CALFED Task Force. Regional coordinators have also worked with other regional groups to update them regarding California Bay-Delta Program activities and to hear what their interests are.
- Prepared a draft of the regional implementation plan for the Delta region. Developed regional brochures and region-specific summaries of interests and accomplishments for the annual reports.

BDPAC

- Supported enactment of the California Bay-Delta Authority Act, federal authorization of the Program, additional state and federal financing of the California Bay-Delta Authority Program, and continued study of the In-Delta Storage Project.
- Assisted the Authority in development of funding principles and guidelines for allocation funds from Proposition 50, including funds for the Science Program and development of Program element priorities and work plans.
- Formed nine subcommittees, which assist the Committee by focusing on individual Program areas and elements: Delta Levees and Habitat, Drinking Water, Ecosystem Restoration, Environmental Justice, Steering Committee, Watershed, Water Supply, Water Use Efficiency, and Working Landscapes.

Finance Plan

- No progress was made in Years 1-2 due to lack of funding and contract issues. In Year 3, progress was made on the finance plan. A technical expert team of consultants and staff were put together to provide guidance and advice on the process, approach, and evaluation of benefits, beneficiaries, costs, tools, and program balance.

Water Management Strategy

- Progress has been made on Common Assumptions (a unified set of data and modeling tools for conducting water management analyses including the Integrated Storage Investigations (ISI) modeling, water use efficiency assessments, and demand computations for the California Water Plan Update).
- Progress has been made on Integrated Key Milestones. Several high priority projects have been coordinated to meet critical deadlines: Central Valley Project Operating Criteria and Procedures Biological Opinion, Environmental Water Account, Tracy Fish Test Facility, Coordinated Operating Agreement, the USBR (b)(2) opinion under the CVPIA and USBR long-term contract renewal.
- Formed a new water management team consisting of two Assistant Deputy Directors with joint responsibilities for all water management program elements and cross-program integration.

Tribal Relations

- The CBDA is securing the services a tribal coordinator, who will prepare a plan for promoting and coordinating tribal relations.

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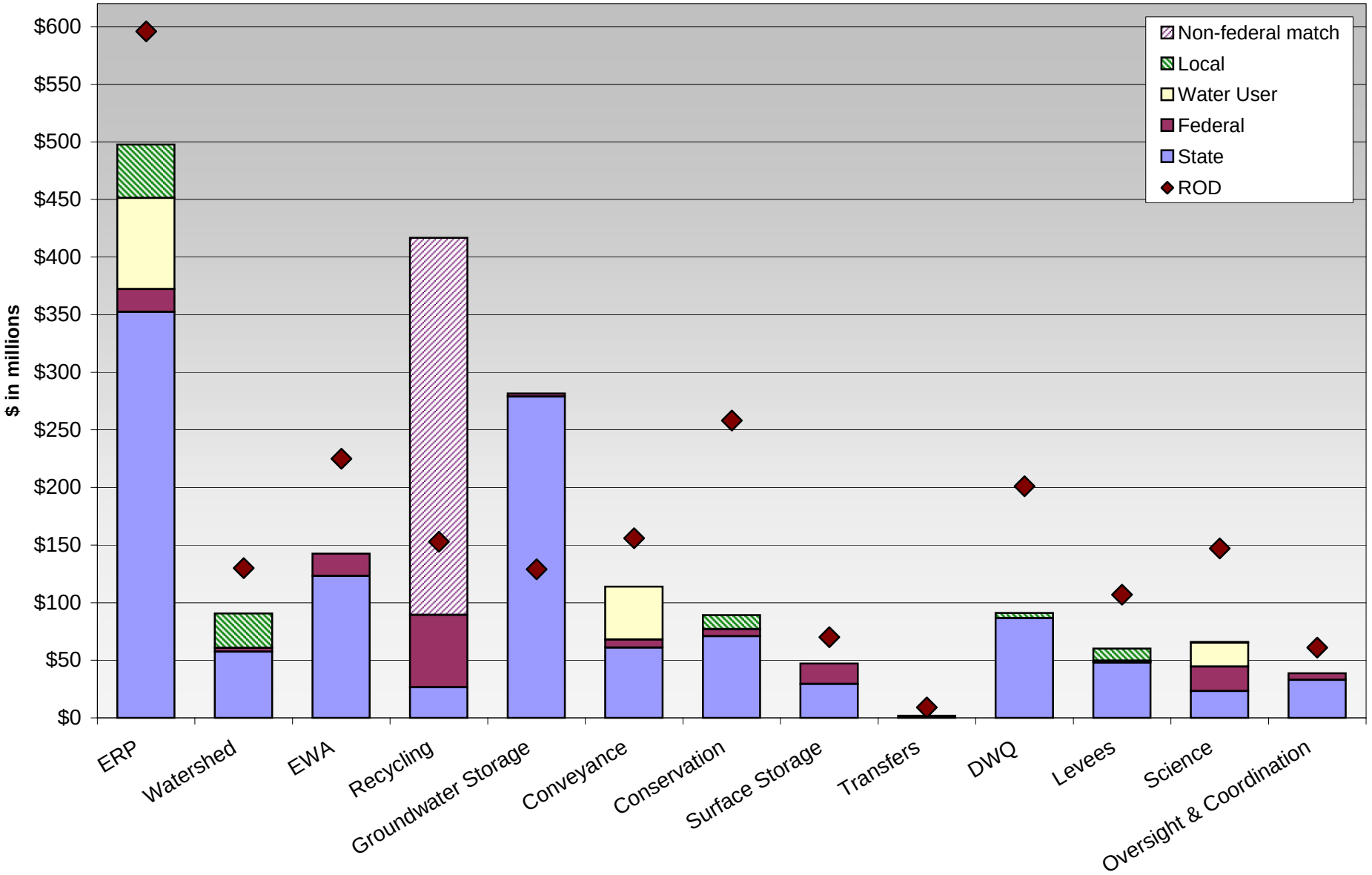
Meeting Date: October 9, 2003

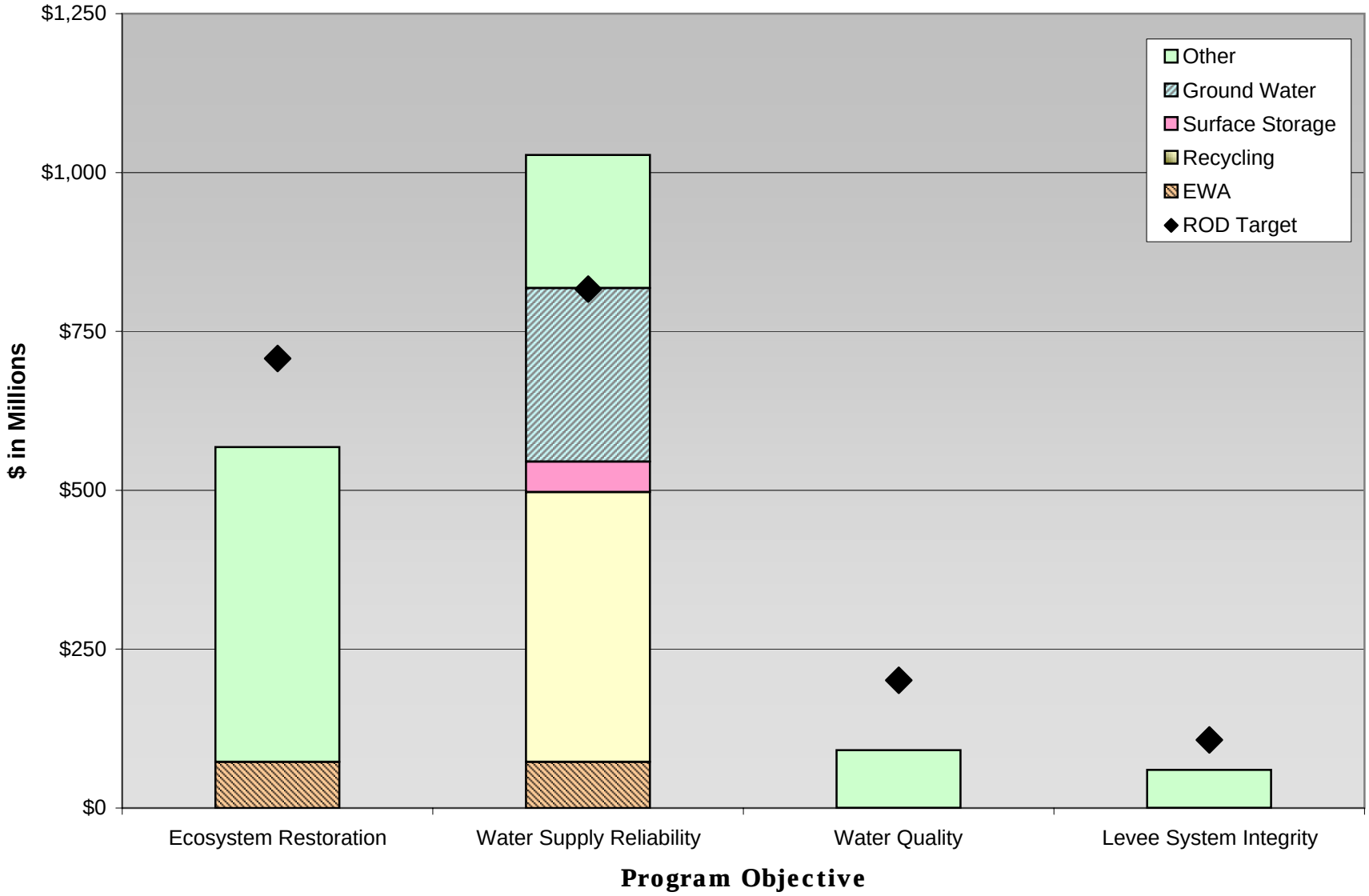
Attachment 3

YEARS 1-7 (STAGE 1) FUNDING INFORMATION

California Bay-Delta Program
Cumulative Funding Years 1-3 by Element



California Bay-Delta Program
Cumulative Funding Years 1-3 by Objective



California Bay Delta Program[1]
Year 4 Funding
($ in millions)
September 24, 2003

		FY 2003-04 State Funding [2]						FY 2004 Federal Funding [3]					Water User/Local Funding [4]				
Program Element	**Total Year 4**	**General Fund[5]**	**Prop 204**	**Prop 13**	**Prop 50[6]**	**Other State Funds[7]**	**State Subtotal**	**W&RR, In-lieu of Bay-Delta[8]**	**USBR W&RR**	**USACE**	**Other Federal[9]**	**Federal Subtotal**	**CVPIA RF**	**SWP**	**Local Grant Matching**	**Non Federal Match**	**User/ Local Subtotal**
Ecosystem Restoration	$173.45	$1.21	$50.10	$10.02	$67.90		$129.23		$1.10	$0.20	$1.59	$2.89	$14.06	$7.27	$20.00		$41.33
Environmental Water Account	$44.01	$0.06			$35.80		$35.86	$8.00			$0.15	$8.15					
Water Use Efficiency	$347.93	$2.98		$29.90	$78.40	$1.89	$113.16		$13.22			$13.22			$11.00	$210.55	$221.55
Conservation	*$61.32*	*$1.96*		*$9.30*	*$34.96*	*$1.89*	*$48.10*		*$2.22*			*$2.22*			*$11.00*		*$11.00*
Recycling	*$286.61*	*$1.03*		*$20.60*	*$43.44*		*$65.07*		*$11.00*			*$11.00*				*$210.55*	*$210.55*
Water Transfers	$0.59	$0.59					$0.59										
Watershed	$29.97	$0.41			$29.57		$29.97										
Drinking Water Quality	$3.11	$0.81		$2.02	$0.28		$3.11										
Levees	$26.26	$0.46			$21.34		$21.80			$1.10		$1.10		$0.36	$3.00		$3.36
Storage	$37.58	$0.52		$10.56	$20.01		$31.08	$5.50	$1.00			$6.50					
Groundwater Storage & Other	*$13.18*	*$0.52*		*$10.56*	*$1.10*		*$12.18*		*$1.00*			*$1.00*					
Surface Storage	*$24.41*				*$18.91*		*$18.91*	*$5.50*				*$5.50*					
Conveyance	$31.83	$2.23		$9.65	$0.60		$12.48							$19.35			$19.35
Science	$34.85	$0.06		$2.03	$19.25	$1.20	$22.54		$4.00		$1.70	$5.70	$0.19	$6.22	$0.20		$6.61
CBDP Science	*$21.81*	*$0.06*		*$2.03*	*$18.95*		*$21.04*				*$0.77*	*$0.77*					
IEP	*$13.04*				*$0.30*	*$1.20*	*$1.50*		*$4.00*		*$0.93*	*$4.93*	*$0.19*	*$6.22*	*$0.20*		*$6.61*
Water Supply Reliability	$76.19				$76.19		$76.19										
Oversight & Coordination	$10.61	$8.86					$8.86	$1.50		$0.10	$0.15	$1.75					
Total	**$816.37**	**$18.19**	**$50.10**	**$64.17**	**$349.32**	**$3.09**	**$484.87**	**$15.00**	**$19.32**	**$1.40**	**$3.59**	**$39.31**	**$14.25**	**$33.20**	**$34.20**	**$210.55**	**$292.19**

[1] The Bay Delta Authority tracks the cumulative spending and progress toward planning objectives set forth in the ROD. Because there is no single agency to implement the Program, these figures provide a broad overview of the cumulative funding federal, state and other agencies on various programs independently implemented by the agencies.

[2] The year 4 State budget includes funding for the California Bay-Delta Authority, Department of Water Resources, Department of Fish and Game, State Water Resources Control Board, Resources Agency, Department of Forestry and Fire Protectio Department of Conservation and the San Francisco Bay Conservation and Development Commission.

[3] Federal funding sources include U.S. Bureau of Reclamation Water and Related Resources funding for the Bay-Delta Program (W&RR, In-lieu of Bay-Delta), U.S. Bureau of Reclamation Water and Related Resources (USBR W&RR), U.S. Army Corps of Engineers appropriations (USACE). Other Federal Funding includes the U.S. Fish & Wildlife Service, U.S. Geological Survey, and the National Marine Fisheries Service.

[4] Water User/Local funding includes State Water Project Funds and CVPIA Restoration Funds that are collected from state water contractors and Central Valley Project water users, but are budgeted and appropriated through the federal and state governments. Local grant matching funds are estimated and updated as information becomes available. In addition, the USBR reports a nonfederal share for the Title XVI recycling projects in FY2004. The state vs. local contribution of this amount are unknown at this time and is therefore shown as nonfederal funding.

[5] Additional General Fund reductions are expected due to possible staff lay-offs and the hiring freeze. This could potentially delay program activities.

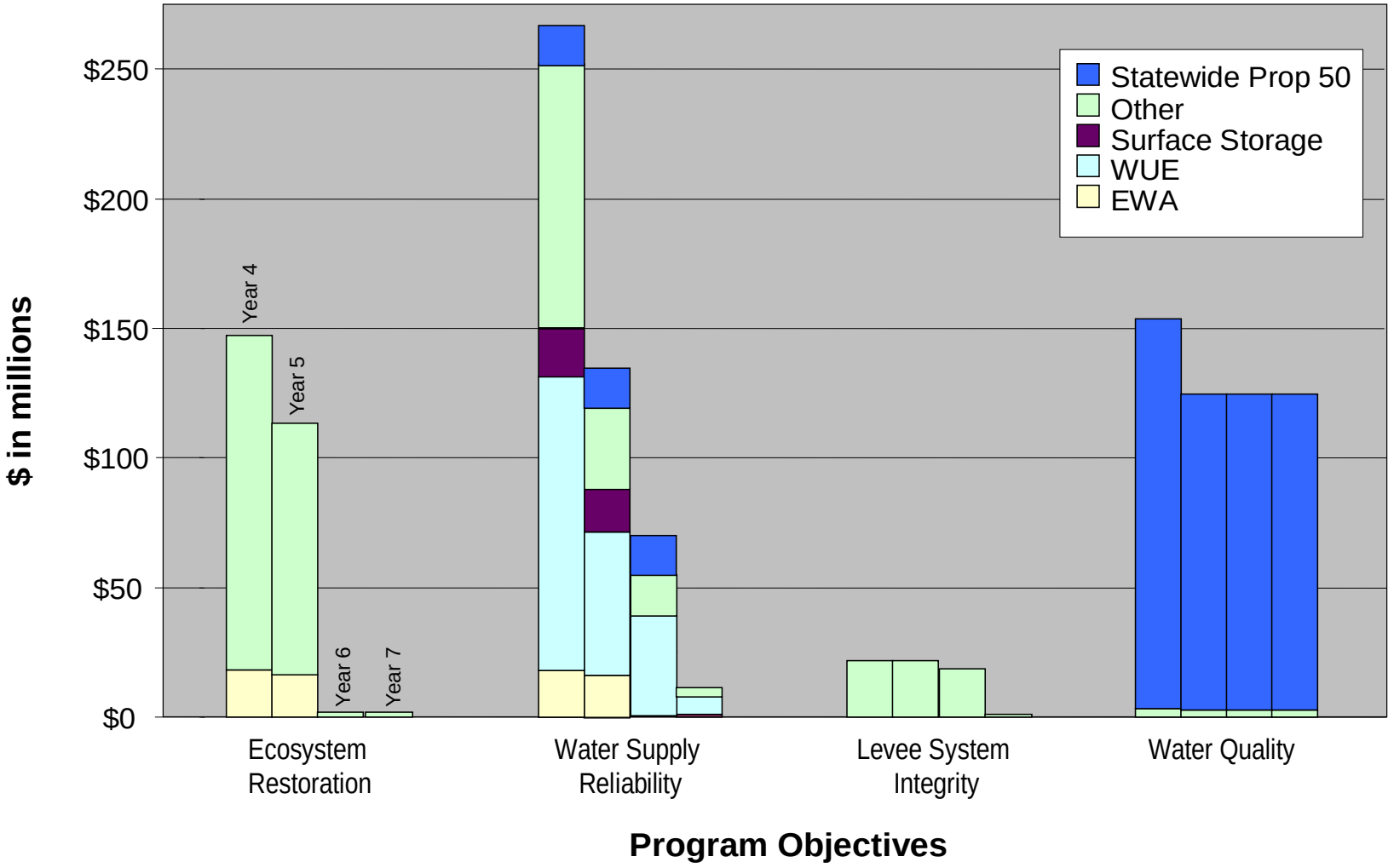
[6] Possible staff layoffs & hiring freeze could delay allocation of bond funds for grant and loan programs. Regarding statewide Prop 50 funding, an additional $235 million (not shown in this table) is available in FY 03-04 for Drinking Water Quality, Desalination and Integrated Regional Water Management. A portion of this funding is expected to support the California Bay-Delta Program objectives.

[7] Includes DWR funds ($1.888m) that contribute to the Water Conservation Program, and Interagency Ecological Program (IEP) funds ($1.203m) from various departments that contribute to the Science Program.

[8] Water & Related Resources (W&RR), In-Lieu of Bay-Delta funds include $5.5 million for the storage program element: Shasta Enlargement ($2.25m), San Joaquin River Basin ($1.0m), Los Vaqueros ($1.75m) and Sites Reservoir ($0.5m).

[9] Includes ERP, EWA, and Oversight & Coordination funding from the National Marine Fisheries Service, and IEP funding (Science) from U.S. Fish & Wildlife Service, U.S. Geological Survey, and National Marine Fisheries Service that contributes to the Science Program.

California Bay-Delta Program
Years 4-7 State Funding



Agenda Item: 7
Meeting Date: October 9, 2003

Attachment 4

Long-Term Finance Plan Status Update

Background

A fundamental priority of the Bay-Delta Program is to maintain a balanced and integrated program. Funding availability over the first three years of the Program has caused delays and threatens the balance. Therefore, it is important to develop a long-term finance plan (finance plan) that enables the Program to continue implementation in a balanced manner.

Developing a finance plan for the Bay-Delta Program will be challenging because of the large scope of the Program, the complex interrelationships between the program elements, the lack of measurable benefits for many programs and projects, and the lack of cost estimates and project descriptions for certain projects.

The Bay-Delta Authority staff and consultants will prepare the following three reports as part of the process:

- ***Framework and Issues Report*** – Fall 2003. Proposes a framework and set of principles for developing the finance plan. Identifies the key finance issues and concerns for the Program as a whole and for each of the program elements.
- ***Draft Finance Options Report*** – Winter 2004. Using the framework and principles described in the Issues Report, develop finance options for each of the program elements based on an evaluation of benefits, beneficiaries, and costs.
- ***Final Finance Options Report*** – Spring 2004. Propose a final set of finance options, including the institutional structure to implement a finance plan.

Independent Review Panel

The Authority staff is convening an Independent Review Panel to review and comment on each of the above reports. The Panel will be asked to review and comment on the finance plan framework, principles, and options developed by staff and consultants. The finance plan also will be developed with agency, stakeholder, public, and legislative involvement.

Staff is recruiting up to 8 nationally and/or internationally recognized experts with a balance of academic and practical experience regarding public financing. Panelists will need to meet all or part of the following backgrounds, expertise and abilities:

- Academic and/or practical public finance experience
- Knowledge/experience with financing for large ecosystem and/or water management programs
- Knowledge/experience in Federal and/or State financing policies, laws, fee revenue systems, or other funding structures
- Academic background in economics or public finance with knowledge of benefit and cost allocation processes related to water or other natural resources programs or projects
- Knowledge of western water and environmental resource issues, policies, or programs
- Ability to work collaboratively and think across disciplines
- Ability to weigh issues in a balanced, objective manner, as reflected in the perceived willingness/ability to integrate across disciplines
- Availability throughout the duration of the appointment

The Panel is expected to be convened by November 2003, and serve a one-year term. Three panel meetings are planned, each to coincide with the three BDA reports. The first meeting will be in the fall of 2003, to review and comment on the Framework and Issues Report. The second and third meetings will be in winter and spring of 2004, to review and comment on the Finance Options Report. Panel meetings are expected to be open to the public.

Panel Deliverables

The Independent Review Panel's final deliverable will be a final written report, which is to include a critique of the staff drafted options analysis for the finance plan. As feasible and appropriate, a final written report may also include specific Panel recommendations regarding a preferred approach for structuring and implementing a finance plan. Staff intends to use the Panel's final report to inform its development of the finance plan for subsequent consideration by the appropriate advisory and decision-making authorities. Some recommendations likely will require legislation.

Stakeholder and Agency Involvement

To foster a process informed by agency and stakeholder views and perspectives, the Panel process will incorporate the continued input of diverse and informed stakeholders and State and Federal agency representatives. These individuals are to participate in two different ways.

Technical Work Group: Technical representatives recommended by stakeholders and State and Federal agencies will be asked to support the Panel's deliberations by helping the panelists and staff to better understand issues under discussion. These

technical advisors are expected to participate in Panel deliberations and provide input and guidance on the process and draft documents as well.

Ad Hoc Work Group: Policy-level representatives from interested stakeholder groups and State and Federal agencies will provide more policy-focused guidance to the Panel and staff. These participants – to be invited to contribute to Panel deliberations and provide between-meeting guidance – are to serve as a sounding board regarding on-going Panel process and issues.